

TITLE 327 WATER POLLUTION CONTROL BOARD

#97-11(WPCB)

SUMMARY/RESPONSE TO COMMENTS FROM THE SECOND COMMENT PERIOD

The Indiana Department of Environmental Management (IDEM) requested public comment from November 1, 1998, through December 31, 1998, on IDEM's draft rule language. IDEM received comments from the following parties:

Gerald (GMI)

Delbert Alphanulp (DA)

Larry L. Alverson, A and A Acres, Inc. (LLA)

Todd Ames, T & E Farms (TA)

Kenneth Anderson (KA)

Jeffrey Sr., Jeffrey Jr., Janice, Julie, and Julie Anne Angus (JA)

Anonymous (AF)

Anonymous (ANON1)

Anonymous (ANON2)

Anonymous (ANON3)

Anonymous (ANON4)

Anonymous (ANON5)

Anonymous (ANON6)

Anonymous (ANON7)

V. Albert Armand (VAA)

Bill Arthur (BA)

Ron Atte (RA)

Linda Ault (LA)

Dallas Baer (DBA)

William Baber (WB)

Chad Baker (CB)

Russell A. Baker (RBA)

Ernest and Henrietta Baldauf (EHB)

Gary and Jo Baldauf (GWB)

Terry Baldwin (TBA)

Bernard Baltes (BBA)

Jeffrey Baltes (JJB2)

Joseph Baltes (JJB1)

Charles A. Barker (CAB)

Ron and Jami Barker (RJB)

Douglas M. Barnes (DMB)

Dawn E. Barnhart, Hog Slat (HSB)

Marvin and Louise Beaman (MLB)

Michael A. Beard, Clinton County Farm Bureau (MAB)

Kenneth Beckman (KB)

Jim Beecher, Hill Top Farm Management (JB)

David K. Beiswanger, Double-D Farms (DDF)

Eldon Beiswanger (EB)

Albert K. Belstra (AB)

Mark Belstra, Lean Line Pigs, Inc. (LLP)

Tim Belstra (TB)

Judy Berkshire, Neighbors for a Clean Environment; Jim Tarnowski, Indiana Campaign for Family Farms; Julian Zizak, The Deputy Project; Rae Schnapp, Hoosier Environmental Council; Bill Hayden, Indiana Chapter of the Sierra Club; Grant Smith, Citizens Action Coalition; and Tom Anderson, Save the Dunes Council (NCE)

Keith and Brian Berry (KBB)

Leo Betz (LBE)

Brad D. Blinn (BDB)

John D. and Shari Blinn (JSB)

Kathleen M. Blinn (KMB)

Max E. Blowers, Wolf Creek Farms (MB)

David R. Bontrager (DRB)

Mr. and Mrs. William L. Bontrager (WLB)

Bruce Bowman, Indiana Karst Conservancy (IKC)

Ray Bozell (RBO)

D. Hile Bradfield and T. Bradfield (DHB)

Darwin Brewer (DBR)

Doug Brookins (DBRO)

Richard L. and Ronald D. Brookins, Brookview Farms (BVF)

John and Suzanne Brooks (BF)

Glenn Brown (GBR)

James L. Brown (JBR)

Jesse P. Brown (JPB)

Rick Brown (RB)

D. Brubaker (DB)

Mark Brubaker (MBR)

Sherman E. Bryant (SHB)

Garry Bucher (GBU)

Jack, Joe, and Jerry Buck (JBUC)

Jason L., Lois K., James C., Brian J., and Jennifer L. Buck (JLB)

Roger L. Bullick (RBI)

Tim Burke (TBU)

William Burke (WBU)

John Burkle, Burkle Acres, Inc. (JBU)

Phillip D. Burkle, Burkle Acres, Inc. (BAI)

Lee Burns (LB)

Bradley D., Dean O., and Brian D. Burton, BDB Farms, Inc. (BDBF)

Dennis and Linda Burton, Burton Farms (BUF)

David W. Busch, Busch Farm Service (DWB)

Steve Byum (SB)

Kirk Caldwell, Caldwell Pork & Grain, Inc. (CPG)

Bill Calhoun (BC)

Gary Carr (GCA)

Roger Carroll (RCL)

Charles L. Carter (CAF)

David A. Chambers (DC)

Gary M. Chambers (GMC)

Mark W. Chambers (MWC)

Walter R. Chambers, Chambers Farms, Inc. (CHF)

Fred Churchill (FC)

Tom Churchman (TC)

Gary A. Clark (GC)

Pete Clark, Clark and Clark (C&C)

Rex Clements (RC)

Michael L. Cline, Cline Farms, Inc. (CFI)

Kama and David Clouse (KCL)

Jeff Cook, Cook Farms (JC)

Robert Cornelius, Daviess County Soil and Water Conservation District (DCSWCD)

Clyde Cornett (CCO)

Sarah Jane Crimmins (SJC)

Richard L. Crimmins (RSC)

Stan and Sally Cripe (SSC)

David L. Crosby, United Feeds (UF)

Keith Crawl (KC)

Kendell Culp (KCU)

Bill and Linda Cunningham (BLC)

Randy Curless, Liberty Swine Farms (RCU)

Tim Czartoski (TCZ)

Brian Daggy, Indiana Farm Bureau (IFB)

Dan Dale (DDD)

Dave Dale, Dale Farms, Inc. (DF)

Sara and Duane Davis, Doubletree Swine (DTS)

Teresa and Lally M. Davis (PD)

William J. Davis (WD)

Mrs. Glen Day (GD)

James Day (JDA)

Richard and Ralph DeKock and John Spurgeon, DeKock Feedlot, Inc. (RDK)

Malcolm S. DeKryger, Iroquois Valley Swine Breeders, Inc. (MDK)

Ch
De
(CI

Gordon and Marilyn Denton (GMD)

Alvin and Mary DeVries (AD)

Edwin L. Diehl (ED)

Wayne Dillman, John M. Evans, Richard Fellows, John Fox, Richard G. Horton, Rodney Kelsay, Marston R. McGwin, David Ring, Danita Rodibaugh, Mark Townsend, Max Wilson, Vic Lechtenberg, Indiana Commission for Agriculture and Rural Development (ICARD)

Leon Dilyer (LD)

Tom D. and Gary T. Dodd, Dodd Farms (DFA)

DeWayne Doty (DWD)

Davey W. and Carol A. Dowell (CAD)

C. Kim Drackett, Fairholme Farms (CKD)

Kevin Drayer (KD)

Jeffrey J. Drehm [sic] (JD)

Bruce Dutter (BD)

Randall E. DuVall (RD)

John D. Eber (JDE)

Olive B. Eber (OE)

Walter Elenakes (WE)

James L. Elgin (JEL)

Howard C. Eller (HE)

Beverly Elliott (BEL)

Dale M. Elliott [sic] (DE)

Duane and Dwight Elliott, Elliott Farms (DDE)

R. Marvin Eltzroth (RME)

Robert M. and Karen A. Eltzroth (RMK)

Bill Sr. and Phyllis Emmert, and Bill Jr., Sherry and David Emmert (BPE)

John, Vicki, Miranda, Julie, and Janell Emmert (JE)

Jim Erickson (JER)

Jana L. Everhart (JLE)

Robert G. Fairclough, Clinton County Pork Producers (CCPP)

Betsy L. Farrer (BFA)

Steve Farrer (SFA)

Tom Farrer (TFA)

Robert Feich (RFE)

Los Fernandez (LFE)

Bill Ferrel (BILF)

Jon Ferrel (JF)

Lynn Fiechter (LFI)

Mark Fiechter, Shel-Mar Farms, Inc. (MFI)

Terry Fleck, Indiana Pork Producers Association (IPPA)

Mark L. Flora, M & E Flora Farm (M&E)

Tom and Travis E. Flora (TFL)

Charles R. Fogg (CF)

Richard and William Fogg (RF)

Thomas M. Folkerts,DVM,PAS, AN-PRO-TECH (APT)

Mr. Thomas W. Fox (TWF)

Steve Frantz (SFR)

Victor, Joe, Frank and Francis Frey (VF)

Larry Frey (LF)

Dennis Freyberger (DCF)

Noble and Edith Fry (NEF)

Craig L. Fuller (CLF)

Maurice O. Fuller (MOF)

Stan Fuhrman (SF)

Troy Furrer, Hilltop Swine and Grain (HTSG)

Norman B. Gable (NG)

Larry and Mona Gaesser (LMG)

Herbert L. Galbreath (HG)

Gerald Garrison (GG)

Bart G. Gauck (BG)

Phil and Chris Gauntt, Gauntt Farms (PCG)

William Gauntt, Gauntt Farms (WG)

Arlan L. Gerber, Double G Farms (DGF)

Douglas M. Gerdon, Dubois Distributors, Inc. (DD)

Eldon Getz, Getz Farms (GF)

Jason Getz, Getz Farms (GFJG)

Sara Getz, Getz Farms (GFSG)

Richard, John, and Raymond Geisler (RJG)

Ronald J. Giesler (RG)

Mike Glunt (MG)

Elbert J. Gordon (EG)

Frank A., James O., Carey R. Gorski, Gorski Brothers Farms (FG)

Matthew Grate, Grate and Sons Dairy Farms, Inc. (GSD)

Ted L. Grayson, M.D., F.A.C.S. (GSFP)

Danny Green (DGRE)

Martin W. Griffin, Griffin Industries, Inc. (MWG)

Carl, Rebecca, and Emily Griffiths, 3G Ranch (CREG)

Don C. Gross (DGR)

Martin R. Grow, Grow Farms and Feedlots (GFL)

Del Guard (DG)

Thomas C. Guckien (TG)

Bruce Guernsey (BGUE)

Steve Gunn, Stewart Seeds (SG)

Bob Gutsell (BOGU)

Bret Gutsell (BGU)

Gary Hamilton (GH)

Stephen Hamilton and Darren E. Lacey (SHDL)

Warren and Karen Hamster (WHA)

Richard W. Hanna (RH)

John D. Hardin, Jr. (JDH)

Dick Harmon (DH)

John Hartsough, DVM, Creekside Farms, Inc. (CRF)

Kurt Haunert (KHA)

Jason Haupert, Bash Hill Family Farms, Inc. (BH)

Lynn Hawbaker (LHA)

Jay Hawley (JH)

Michelle R. Hazlett (MRH)

Jeff Healy, P.E., Banning Engineering (BE)

David and Tara Helms (DTH)

Jerry L. Hendress (JLH)

L. Hendrickson (HF)

Dana Hile (DHI)

Paul D. Hile (PH)

Scott Hile (SHI)

Richard Hill, Save The Valley (STV)

Stephen J., David L., and Sam T. Himsel (SH)

Susan K. Hipp and Thomas J. Nieman (SKH)

Paul J. Hirt, D. V. M. (PJH)

David L. Hoar, Maple Hill Farms (MHF)

Daniel H. Hochstetler (DHH)

Howard W. Hochstetler (HH)

Allen Hoden [sic] (AH)

Jon Hoek (JHO)

Fritz Holzgreffe, Jr., TRI-GER Company, Sow Breeders Partnership, Pork Producers, Ltd. #1, Pork Producers, Ltd. #2, Land Trust #2128, Cardinal Farms, Agrivest (AGRI)

Ralph Homan (RHO)

Don, Alvin, Dan Hook, Don Hook Farms, Inc. (DHF)

Cordell and Shawn Hoover (CSH)

G. Hoover (GHO)

Brad Hopf (BHO)

Marvin J. Hopf (MH)

Doug Horn (DHO)

William L. Horn (WLH)

Levi J. Huffman, Wise-Huffman Farms (LH)

Kenneth W. Hunt (KH)

William E. Hunter, CPA, Bucheri McCarty & Metz (BMM)

Amy Hutson (AHU)

Said Iales [sic], Hog Slat (HSI)

Terry Idlewine (TI)

Indiana AProud@Pork Producer (IPPP)

Jerry C. Jackle (JJA)

John F. Jackle (JJ)

Bob Jackman, State Senator (BJ)

Robert T. Jackman, D.V.M., Jackman's Animal Clinic, P.C. (RTJ)

Carlene Jackson, Guy Jackson Purebreds (CJ)

Guy Jackson, Guy Jackson Purebreds (GJ)

Samantha Jacobs (WSJ)

Thomas and Vicki Jellison (TVJ)

Forrest Johnson (FJ)

Donald, Robert, Shirley M., Mack, and Melissa Jones (DJ)

Roy and Becky Jones (BRJ)

William Jones (WJ)

Phillip P. Jordan (PJ)

Rex Journey (RJ)

Thomas P. Kabrich, National City Bank (NCB)

Keith Kaehr (KKA)

Sam Kaehr (SK)

James O. Kendall, Daviess County Pork Producers (DCPP1)

Joseph T. Kendall (JTK)

Virgil and Bernadine Kendall (VBK)

William E., Don, and George T. Kendall, Kendall & Sons, Inc. (DCPP)

Ralph Kennedy, Kennedy Farms, Inc. (KF)

Craig Kennell (CK)

Harold W. Kieffner (HWK)

Jeffery L. Kiess (JKI)

Dave and Linda Kilmer (DLK)

Brandon King (FS4)

Daryl H. King (LLP1)

Diana King (DKI)

John D. King (JK)

Terry and Sandy Kirtley (TSK)

Herman Kleiman (HK)

Larry Klemp (LK)

Dale Knies (DK)

Oscar Knies (OK)

Bob Knoth (BK)

Jeffery A Koehler, Koehler Farms (JAK)

Norbert M. Korty (NK)

Cecil Kosethe [sic] (CKO)

Ken A. Krem [sic], DVM (KAK)

Mike Kriopke (MK)

Karl Kroeger (KK)

Arno J. Kuhn (AJK)

Fred Kunkel (FK)

Jim Kunz (JKU)

Kenneth L. Kunz (KLK)

Richard LaCroix, Land O'Lakes, Inc. (LOLRL)

Dave and Stephanie Lambert (DSL)

Bruce L. Lamb, DVM, Northern Lakes Food Animal Veterinary Service (NLFA)

Lester V. Lambright, Northeast Swine Services, Inc. (NESS2)

Donna J. Lane (DL)

Larry L. Lang (LL)

Kenny Lange (KYL)

Jeff Lantz (JL)

John Lash, Lash Farm (JLA)

Bruce Laub, Laub Farms (BLF)

Brad A. Lawrence (BLA)

Susan E. Lawrence (SEL)

Mark Legan (MLE)

Karen E. Lehe, DVM MS, Wolcott Veterinary Clinic (KEL)

Daniel J. Leman (DJL)

Jeffrey Leman (JLEM)

Ben H. and Martha E. Lemmon (BL)

Charlie Lemmon (CLE)

Mike and Denise Lemmon (WH)

Ray Lengacher (RL)

Mike Lewis (ML)

Steve Lewis (SL)

Kathy Liechty (KL)

M. Joe and Wallace L. Linneweber (MWL)

Rick and Marilynn Livinghouse (RML)

Richard L. Lloyd, Lloyd-Weber Farms (RTL1)

Tim Lloyd (RTL2)

Erle G. Lockhart, Lockhart Farms (EML1)

Mary Jane Lockhart (EML2)

Charles Lee, Aaron Charles, and Nathan Lindsey Long (CLL)

Jeffrey D. Long (JLO)

Carman J. Loudon (CL)

Dale Lowe, Lo-Fer Acres (DLOW)

Dean Lowry (DLO)

Geriann Lueken, Lueken Dairy Farm (LUE)

Cathie Lukens (LUC)

Jennifer A. Lukens (LUJ)

L. D. Lukens (LUL)

Micah Lukens (LUM)

? Lukens (LUI)

Arthur M. Lumpkin, Richard Smith Farms, Inc. (AML)

William J. Malle (WM)

Fred Mann, White Oak Farms (WOF)

Jeffery P. Mann (JPM)

Luther Mann (LM)

Robert E. Marley, Jackson-Jennings Farm Bureau Cooperative Association, Inc, (JJFBC)

Tim Marlow, Lowes Pellets & Grain, Inc. (LPG)

Kevin and Betsy Marshall (KBM)

Richard Martin (RMA)

Tim Martin (FS3)

Mike May, May Farm (MM)

Richard and Joan McCain, Jo Ric Farm (RJMC)

Mike McConnell (MMC)

Susan McCormick (SMC)

Jeffrey D. and Collry McDrath [sic] (CJMC)

Herbert McGaughey (HMC)

R. Craig McGill, Tri-M Farms, Inc. (TMF)

Phil McIntosh (PMC)

James S. McKee (JMC)

J. McKinney (JMCK)

Roberta McNear (FS2)

Shawn G. Meek (SM)

Jeffery W. Mendenhall (JWM)

Robert and Margaret Merkel (RMM)

Charles W. Merlau, Jr. (CM)

Max L. Metzger (MLM)

Joe Meyer (JM)

Bruce Miller, B + D Miller Farms, Inc. (BDM)

Charles Miller (CMI)

D. J. Miller (DJM)

Gary L. Miller (GLM)

Henry L. Miller (HLM)

Jacob S. Miller (JSMI)

Merle Miller (MMI)

Wilbur Miller (WMI)

Anita Mills (AM)

David A. Minich, Minich Farms Inc. (MIF)

Rebekah Minnick (RMI)

Raymond Miorulman [sic] (RM)

Joseph A. Misch (JMI)

Brian Mitchem (BM)

Sam Moffitt (SMOF)

Stan Moore (SMO)

Steve and Martha Moore (SMM)

John and Melba Moorhouse (JMM)

Jeff, Jenson, Jeremy, John, Melinda A., P. Scott, Phillip, Rita K., and Zachary Morgan, Morgan Farms (MF)

Jim, Teri, Lowell and Helen Morgan (HMO)

Cliff Morrical (CMO)

H. Morris, Hog Slat (HSM)

Doug Moser (DMO)

Dwight Moser, Pin Hill Acres, Inc. (DMOS)

Philip Moser (PMO)

Monty Moss (MMO)

Don, Connie, Doug and Dewayne Muhlenkamp (DM)

Gary L. Munson (GM)

Harold Myers (HM)

Lee Nagai, P.E. (LN)

James D. Need, NBD Bank, N. A. (JDN)

Michael Nelson, Nelson Farms (NF)

Mark Nesbitt (MN)

Robert Newcomer (RN2)

Rollin Newcomer (RN1)

Nathan Newkirk (NN)

Robert H. Nickeson (RHN)

Doreen J. Nieman (DJN)

Eric J. Nieman (EJN)

Larry and Sandra Nieman (LNI)

Maurice and Esther Nieman, Nieman Home Farm, Inc. (MEN)

Kevin O'Farrell (KG)

Kyle P. O'Farrell (KOF)

Rok Orebaugh (RRSO4)

Ron Orebaugh, Indiana State Dairy Sanitarian-East Central Indiana (RROS1)

Ron Orebaugh, Vice-President of The Delaware-Blackford Pork Producers (RRSO2)

Susan Orebaugh (RRSO3)

Tim Ort (FS1)

Timothy M. Ortman, Kokomo Grain (KGR)

Brad Ostenholt (BO)

Alan Osterlund (AO)

John H. Overleese, DVM, Lynn Veterinary Hospital (LVH)

Jason Oyler (JO)

Earl Ozee (EO)

Roger Packwood (RP)

Allen Parker (APA)

Nichole R. Parkes (NP)

Allen Paschen (AP)

Marvin Pauott (MPA)

Lisa Paxton (LP)

Mark Pearson (MP)

Ed Pellock (EP)

James, Kirk, Rod, and Todd Perkins (PTCF)

Allen D. Perlich (ADP)

Donald Peters (DP)

John and Kathy Peters (JKB)

John C. Peters (JP)

Wesley D. and Lynn Peters, L & S Peters Farms, Inc. (L&SP)

Steve and Gayle Pohl (SGP)

Stephen E. Powell, Ph.D. (SEP)

Doug Powers, DVM (DPO)

Larry and Robert Pumphrey, Ag Production Ent., Inc. (APE)

Levi Raber (LR)

Monroe Raber (MR)

Bob Ramsey (RPM)

Ed Reckelhoff, Jr. (ER)

Benny J. Redding (BJR)

Tim Redding (TRE)

Elvert Redicker (ERE)

Ray Redicker (RRE)

Gary Reding (GR)

Bob Redman, Redman Farms, Inc. (RFA)

Mark Reeves (MRE)

Christine Reeves (CRE)

Don Reiboldt, Treve Reiboldt (DTR)

Kip, Carolyn, Cathie, Candy and Caitlin Reidenbach, Max and Joyce Reidenbach, and Van, Michael, Amanda, Kyle and Emmlese Nuerge, KMV Family Farms (KMV)

Bill Reiff (BR)

Vic Reinhard, Northeast Swine Services, Inc. (NESS1)

Randy Renbarger (RREN)

Bob Replogle, JTH, Inc. (JTH)

Mary Lee Riley (MLR)

Herbert H. Ringel, Ringel Farms, Inc. (RIF)

Robert Rinky (RR)

Tom Ripberger (TR)

Steve Ritchie (SR)

David Riugger, Monroe Grain and Supply (DR)

Jerry D. Roberts (JDR)

Randy D. Roberts (RDRO)

Rick D. Roberts (RDROB)

Roger A. Robinson (RAR)

Roger D. Robinson (RDR)

Dennis R. Rodgers, D & G Farms (DGFA)

Kent Rose (KRO)

Bill Rosenbaum (BJRO1)

Brian Rosenbaum (BJRO2)

Jerry Rosenbaum (BJRO)

Mark Rosene, Rosene Stock Farms, Inc. (RSF)

Kevin Ross (KR)

Kevin Roth, Grabill Bank (GB)

Christopher W. Rumsey, D.V.M, Herd Health Veterinary Services (CR)

Thurman, Ken, and Dennis Runyan (TRU)

Randall E. Salsbery (RES)

Stephen Sander (SS)

Bob Sang, Hog Slat (BS)

Herman L. Scheller (HLS)

Dean Schieber (DSCH)

Randal and Doris Schipper (RDS)

Byron Schivier (BSF)

Noah Schmuller [sic] (NSCH)

Dr. Rae Schnapp, Hoosier Environmental Council (HEC)

Wayne T. Schnarr, Wayne T. Schnarr Farms (WSF)

Donald Schnitker (DS)

Keith Schoettmer, Schoettmer Prime Pork Farm, Inc. (KSCH)

Brian Schroeder, Bill Schroeder Farms (BSCH)

Jonathan L. Schroeder, Schroeder Pork & Grain, Inc. (JLS)

Rebecca Schroeder (RSCH)

David Schooner (DSCHN)

Melinda Schultz-Burton (MSB)

Arvin Schurmeier, Schurmeier Farms, Inc. (SCA)

Marvin Schurmeier, Schurmeier Farms, Inc. (SCM)

Mike Schwert, M & M Schwert Farms (MS)

Brad Scott (BRS)

Dave F. Scott (DFS)

Gary Scott (GSC)

John R. Scott (JRS)

Kevin P. Scott (KSC)

Terry L. Scott (TS)

Ray Seceingley (RS)

Jason E. Selking (JELS2)

Lynn E. Selking (JELS1)

Gene Sherfick, Martin County Soil and Water Conservation District (MCSW)

Terry Shaffer (TSH)

Patrick A., Brian M., Michael A. and Mervin L. Shuter, Shuter Sunset Farms, Inc. (SSF)

Jerry G. Sibbitt (JGS)

John D. Sieberns (JDS)

Richard Simon (RSI)

Larry Skiles (LS)

Gregory D. Slipher (GDS)

Gordon Smiley (GS)

Pastor Alfred Smith and Mrs. LaVon Smith (ALS)

Byron Smith, R & B Farms (RBF)

David L. Smith (DLS)

Jeffery L. Smith (JLSM)

John Smith (JSM)

Merrill Smith (MSM)

Paul D. Smith (PS)

Tamika Smith (TSM)

James Smoker, Smoker Farms (JS)

Mike Smolek, Smolek Livestock and Grain, Inc. (MSMO)

Gary Snipes (GSN)

Janis E. Snoeberger (JES)

Carroll E. Speaker (CES)

Randy Spindler, Spindler Swine & Grain, Inc. (RSP)

Melvin L Sporleder (MLS)

Vincent Springmeyer (VS)

Jon M. Starr, Starr Farms (SFAR)

Richard Steele (RST)

Joe Stein, Jr. (JST)

Dennis Steinfert (DST)

Fenton C. Stephen [sic] (FCS)

Melvin and Gertrude Stephenson (MGS)

Roger Stetzel (RSTE)

Dale S. Stevens, Stevens Farms, Inc. (STF)

Allen Stout (AS)

Donald H. Strietelmeier (DHS)

Kevin Strunk, CPG, Wabash Resources & Consulting, Inc. (WR)

Kent Sullivan (KSU)

David M. and Roger L. Sutherlin, Cedar View Farm LLC (CVF)

Ronald L. Sutherlin, Cedar View Farm LLC (CVF1)

Don Swartzentruhr (DSW)

Kenneth E. Swartzentruber (KS)

Carl W. Swinford, Swinford & Frantz Farm, Inc. (CWS)

William Taylor (WT)

Benny Teel (BT)

Jeff Teel (JTE)

Lynn A. Teel (LT)

Randy Teel (RTE)

Bill Tempel (ABT1)

Angela Tempel (ABT2)

Lloyd Templin (LTE)

Mitchell F. and Judith A. Thais, Thais Turkey Farm (TTF)

Charlene and Roger K. Theuer (CRT)

Kevin, Gene, Joan, and Jeri Thompson, Thompson Farms (TF)

Bruce Thomson (BLT)

Laura Thomson (BLT1)

April Threlkeld, Hog Slat (HST)

Darrell Tillson (DTI)

Jon A. Timbrook, Noble County Pork Producers Board of Directors (JT)

Rodney S. Tincher, Tincher Swine Service (RT)

Joe Tinsman, Jr. (JTI)

William H. Toedebusch (WPF)

Roger Tonsfeldt, Hog Slat (HSRT)

Gene Toschlog (GT)

Pat Tovey, Hog Slat (HSP)

Larry J. Trapp (LTR)

Nathan Trapp (SNT1)

Susan Trapp (SNT2)

Sam Trebley (ST)

Jeff and Jane Trenary (JJT)

Delbert Turner (DT)

James and Mary Umicker, and Dale N. Eatz (JMU)

William VanderMolen (WVM)

William L. and Cynthia A. Versemon (WCV)

Paul A. Vidrine (PV)

Roger Vincent, Partner of Vincent Farms (RV)

Stephen Vojtko (SV)

Terry Volz (TV)

Norman D. Voyles, Jr., Voyles Farms, Inc. (VFA)

Ira Wagler (IW)

Norman Wagler (NW)

David J. Wagner, Wagner Farms (DW)

Mary Lou Wagner (MLW)

Sarah Wagner, Wagner Farms (SW)

David Wagoner (DW)

Kenneth Wagoner (KW)

Brent Waibel (BWA)

Harold N. Waibel (HW)

Dean Walker (DWA)

Lynette Walter, D & L Swine Genetics, Inc. (DLSG)

Richard H. Ward, R&R Ward Farms, Inc. (RHW)

Michael A. Wassmer (MW)

David Weber (DLW)

Brad A. Wehr (BAW)

Todd C. Welch (TCW)

Robert Wendt (RWDT)

Ron Westerfeld (RW)

Chris S. Wetli (CW)

Eugene Whitehead (SRF1)

Kaye, Bill, and Eugene Whitehead, Seldom Rest Farms, Inc. (SRF)

Kurt Whitehead (KWH)

Joe Whitstone & Family (JW)

Matt Willhelm (MWI)

Terry R. Williams (TW)

Richard M. Wills (RWI)

Edward L. Willson (ELW)

Kevin Wilson (KWI)

Loran B. Wilson (LW)

D. Rick Winkler, Land O'Lakes, Inc. (LOL)

Fred, Robert, Jeff A., and L. Wise, and Russell E. Ganison (WW)

Philip Wise, Philip Wise Farms, Inc. (PW)

Jack L. Wuensch (JLW)

Brad Wuethail [sic] (BW)

Mike Yankanskas (MYA)

John C. Yarian, Paul Davis Farm (PDF)

Larry Yazel, C. L. Rhoad Corporation (CLR)

Larry Yazel, President, Phillip G. Anderson, Executive Vice President, Indiana Beef Cattle Association (IBCA)

LaVern E. Yoder (LV)

Martin Yoder (MY)

Robert Yoder (RY)

Robert A. Yoder, John M. Devine, Tim Armes, Gene Eaton, Terry Eaton, Delmer Graber, Mark Sauder, Jay Armes, David R. Wagler, Darrell Eaton, Jay Eaton, Dan McAtee, Harry Knepp, Daviess County Pork Producers Board Members (DCPP2)

Toby Yoder (TY)

Vernon Yoder (VY)

Christine York, Hog Slat (HSCY)

James O. York (JOY)

Mark York, Hog Slat (HSY)

Jim L. Yost (JY)

Monty Zapf (MZ)

Randall and Mary Zeigler (RZ)

David Zeltwanger, Morgan Hill Inc. (DZ)

Jon D. Zink (JZ)

Following is a summary of the comments received and IDEM's responses thereto.

General Comments

Comment: Commentors that do not want new rules. (RCL) (PW) (NN) (RG) (HM) (RP) (TF) (MWG) (DT) (SMM) (TRU) (WG) (JDA) (RF) (DH) (AS) (DSW) (CSH) (JMM) (RZ) (KBM) (TVJ) (JSB) (BDB) (TC) (LP) (LUC) (LUL) (LUM) (LUI) (MRH) (NP) (DTI) (JLO) (MWI) (MH) (DW) (CLL) (NW) (LV) (LUC) (KL) (RPM) (RC) (DSCH) (CRF) (DFA) (MPA) (BSF) (AHU) (LFI) (JBUC) (DDF) (ANON2) (JPB) (JEL) (JDR) (SFAR) (SHI) (BPE) (LFE) (KCU) (LVH) (DHI) (SV) (DKI) (FCS) We pork producers are being penalized for doing a good job of having very few discharges into Indiana streams and rivers. Why is IDEM wanting to change your rules and guidelines if violations are being kept to a minimum? (RA) I think it would be much easier to simply make fines incredibly high so that a producer would be much more cautious about when and where he spread his manure. It would also be easier to make laws include provisions for repeat offenders to be prohibited from raising animal for a set amount of time, and after a prescribed training program had been completed. Deal with the ~~A~~problem@producers, don't penalize the whole group. (PV) (TCW) (TG) (HLM) Set high levels of fines for repeat offenders. (GS) I would think that the IDEM farm inspections, which are now underway, would tell you that Indiana hog producers are not the problem that the environmental groups are portraying us to be. (TW) When you did your survey of large livestock farms and found that they have not threatened water supplies, you said that only two percent of the operations had environmental problems, but the problems didn't constitute any imminent threat to the waters of our State. Yet, you want to implement far too stringent regulations that are unacceptable and provide no environmental benefit. (MRE)

Response: IDEM began the rulemaking in order to update the states regulatory system for confined feeding operations and to incorporate basic performance standards and specific design, construction and operation requirements in a rule. In the past, our approval program was operated strictly by unpromulgated guidance and therefore was more subject to legal challenge, which did serve the producers, the citizens or the environment. In addition, Indiana citizens requested the Water Pollution Control Board to consider environmental protection mechanisms for confined feeding operations.

Based on the inspections which were completed in 1999, approximately 82% of the sites had no concerns, 14% of the sites had maintenance concerns, 2.5% of the sites revealed discharges or imminent threats of discharge, and 1.5% revealed significant or repeated discharges. These inspections evaluated the sites for point source discharges and not non-point source areas. This data, while not complete, demonstrates that further improvements at many sites are needed. Rules also assure that a level playing field exists in terms of sound environmental management for all operations and specific guidance will be provided on how to operate a facility to assure that the water quality is protected. Without rules, proper enforcement against those who are not properly operating their facility and threatening the state's water quality would be difficult.

Comment: Commentors concerned about interference with property rights. (JMC) (KCU) (ML) (JZ)

(RDRO) (JJFBC)

Response: It is not the intent of IDEM, through these rules, to infringe upon anyone's personal or property rights. These rules are intended to provide a framework for confined feeding operations to operate in an environmentally sound manner in order to protect the waters of the state and allow all citizens to benefit from this valuable natural resource.

Comment: A feeding confinement should be able to operate without an approval from IDEM. (LD) I believe the IPPA should have the right to regulate itself within reason. (RT)

Response: The state statute, IC 13-18-10-1, established by the Indiana State Legislature, requires an approval from IDEM prior to construction of a confined feeding operation. These rules are being proposed to implement the state statute.

Comment: Commentors that feel IDEM is exceeding its authority. (JH) (TS) (DS) (BR) (HMC) (DGRE) (KBB) (EML1) (RTJ) (TF) (BDM) (BR) (MWG) (EML1) (CRE) (LL) (NLFA) (SS) (GDS) (JPM) (SL) (ML) (GM) (JJFBC) (LUE) (RSI) (WOF) (NF) (KHA) (SHB)

Response: The authority of IDEM to regulate confined feeding operations is found in a number of statutes, including the following:

1. IC 13-18-10, specific to confined feeding operations
2. IC 13-12-2-1, IC 13-18-3-1(1), IC 13-18-3-11, protection of public health, safety, and welfare
3. IC 13-12-3-1(3), IC 13-18-3-1(2), protection of the environment
4. IC 13-14-8, IC 13-14-9, rulemaking authority and procedures
5. IC 13-18-17, protection of groundwater

It is IDEM's position that the proposed rules are within the scope of these statutes.

Comment: The environmental boards and IDEM have the authority, and in fact are mandated, to assess and bring many issues to bear on a regulation. Language currently in the rule, which affords the commissioner the authority to consider other environmental factors for construction of lagoons and the like, is appropriate and necessary to carry out the legislative intent of the state's environmental laws. Moreover, the rule must include additional issues that have not been addressed, such as air quality. (NCE)

Response: The specific authority granted by the legislature for this rulemaking directs the Water Pollution Control Board to adopt rules. The Water Pollution Control Board is charged with adopting rules to protect the water quality in the state. Therefore, issues that fall within the authority of the other boards, such as air quality, are not being addressed in this rulemaking.

Comment: Commentors concerned that the draft rules are a hardship or may put farmers out of business

(JRS) (JH) (BILF) (DPS) (TTF) (CVF) (TSM) (JBU) (TR) (ALS) (JELS2) (EHB) (RHW) (BRJ) (PJ) (RA) (MM) (MLW) (SEP) (DCSWCD) (WCV) (DJ) (FS1) (FS2) (FS3) (FS4) (JMI) (GHO) (NLFA) (KSU) (RTL1) (RFA) (KWH) (ANON3) (JBR) (DGFA) (GR) (KSC) (JJB1) (JJB2) (RJG) (MFI) (WD) (RHO) (RL) (MZ) (CES) (IW) (KG) (GD) (BLA) (KMV) (JKB) (LPG) (WE) (ANON4) (VBK) (RDROB) (EB) (ANON7) (RSF) (MY) (DHH) (BFA) (BLT) (SFA) (RSC) (LTR) (KMB) (ELW) (SH) (PTCF) (MCSW) (KF) (JMCK) (SV) (TSH) (GS) (DST) (DR) (MN) (BA) (CD) (CAF) (LLA) (RMA) (GSN) (DTS) (RT) (JTK) (DCPP2)

Response: IDEM has worked with the Legislative Services Agency to conduct a fiscal analysis of the impact of the proposed rules. This analysis concludes that costs should not be at levels that should put a significant number of producers out of business. Costs are in line with those that would result from meeting environmental requirements in many other states in the region.

Comment: Commentors concerned with regulations that are reasonable. (RDS) (LR) (GMD) (DM) (KD) (DWB) (DLSG) (DCSWCD) (CRT) (BBA) (JW) (SNT2) (TRU) (KW) (JLW) (SMC) (CF) (JB) (BRS) (WMI) (CPG) (BLF) (GFJG) (GFSG) (DCPP) (ED) (SMO) (PD) (DSCH) (GMI) (MMI) (LBE) (HLM) (BT) (DBRO) (RREN) (HSY) (MFI) (HK) (JER) (JSMI) (TY) (RSF) (BPE) (JSM) (LUE) (DRB)

Response: IDEM has made every effort to include affected stakeholders in the extensive discussions that have gone on during the development of this rule. It is IDEM's goal to develop rules that are protective, fair, and reasonable and also provide the regulated community with a clear understanding of agency expectations.

Comment: Commentors supportive of rules for confined feeding operations. (JER) (BLC) (LLA) (CM) (JLS) (DZ) (RWDT)

Response: IDEM concurs that regulations are needed to provide adequate protection of human health and the environment.

Comment: Our primary concern is that CAFOs be constructed and managed in a way that they will not result in pollution of the air, water, and land. We believe that zero-discharge should be a goal, but it is not a reality. (STV)

Response: IDEM agrees that protection of the air, water and land is important. The scope of this rulemaking is protection of waters of the state. Guidance will address best management practices for protection of the air and land. The term zero-discharge refers to no permissible discharge.

Comment: Our concerns with the new draft rules is the micro-management of our business, the lack of scientific basis for the rules and the legal language that an attorney can find loop-holes in for law suits and violations. (DTS)

Response: This rule has been developed with input from a number of technical experts from Purdue University, the Indiana Pork Producers, Indiana Poultry Producers, Indiana Farm Bureau, Office of the Commissioner of Agriculture, other agricultural groups as well as many citizens. The rule is designed to provide flexibility for producers to show that specific technologies or ways of management are as

protective as the requirements of the rule. In this way, producers are given performance goals to meet and are allowed to meet those goals in the way most efficient for their particular operation. Many specific requirements that were in previous rule drafts have been removed in the current version of the rule and will be addressed in guidance documents.

Comment: We feel that the draft rules need considerable work on them. They greatly increase impact to CFO industry by significantly limiting management operations, limiting design options for manure management systems, limiting land use and requiring more recordkeeping and notifications. (DCPP1) (DLK) (APT) (JTK) (DCPP2)

Response: Since these comments were made, IDEM has worked extensively with the public and significant revisions to the rules have been made from earlier drafts. IDEM does not believe the draft rules will be burdensome to producers. Most of the provisions reflect management practices that producers should already have implemented to run a good operation. The rules will only apply to operations that meet the definition of a confined feeding operation in 327 IAC 16-2-6, and other animal feeding operations in 327 IAC 16-2-29; smaller operations will only have to comply with this rule if they have a water quality violation.

Comment: Commentors that want to follow the current AW-1 guidance instead of rules. (SGP) (VY) (JTK) (MF) (DG) Commentors that want guidance instead of rules. (EP) (PS) (DTS) (AML) (MMO) (DCPP1) (DCPP2) (MMO) (DMO) (KH) (KC) (DCPP1) (JZ) (GSFP) (GSN) (LM) (JLSM) (DCPP2) My suggestion is to follow the voluntary program of issuing building permits requiring manure management plans with limited inspections to follow up on complaints. (RM) The regulation should set the performance standards that the producer is expected to meet and then the guidance document should outline suggested methods of reaching that performance standard. The rule should be based on performance standards rather than attempting to regulate management of the operation. (IFB) (ICARD)

Response: Rules assure that a level playing field exists in terms of sound environmental management for all operations. Note previous justification for moving forward with rules. The rules are based on performance standards and provide considerable flexibility in design, construction and operation as long as the basic performance standards are met. The accompanying guidance document is under development and will be available prior to final action by the Water Pollution Control Board on the rules. IDEM concurs that the regulation should set performance standards and some fundamental design, construction and operation requirements and that the guidance should provide more detail on methods of complying with the regulation.

Comment: Many of the rules give one person too much control. I do not think one person should have total control of a situation especially with the openness of many of the rules. There needs to be specific guidelines and some type of due process. (SSC)

Response: While the rules reference the commissioner as the ultimate decision maker, it is the support staff that evaluate situations and make recommendations to the commissioner on what action should be taken. The rule has been modified to clarify that the commissioner must provide justification for any decision and all decisions of the commissioner are appealable under IC 4-21.5-3-7.

Comment: I feel facilities should be considered on a case by case basis rather than a blanket regulation

policy with consideration being given to whether there have been water quality violation complaints or not. (LW)

Response: The draft rules provide the parameters for the operation of confined feeding operations. Each application for a new or expanded operation is reviewed individually and approved based upon site specific information provided by the applicant. The draft rules provide flexibility at 327 IAC 16-5 for the applicant to have an alternative design, compliance approach, or innovative technology built into the approval. The rules have also been modified to give additional consideration to facilities that have had a discharge to water.

Comment: Commentors that want the rules to be based on science. (DSCHN) (GG) (DK) (JTK) (DCPP2) I would only ask that effort be made to identify the reason for these rules and methods to evaluate any action taken. (APT) Purdue University provides an entirely different set of figures on the percent of water in Indiana that is a threat to human use. Can you provide proof of the figures you project as endangered water supply which the public is using? (RMA)

Response: The proposed rules have been developed using information from the animal science literature, the Confined Feeding Technical Workgroup, and the over 25-years of practical experience IDEM staff have had in regulating confined feeding operations and protecting the environment. The manure application requirements proposed for application rates are based on agronomic science. Setback distances are similar to those recommended in the AW-1 Guidance Document, but there have been situations where lack of use of such practices have resulted in manure getting into streams after land application. Setbacks allow for an area in which to recover material should a spill occur near the application boundary. Some distances proposed in the rule have been changed. IDEM's State of the Environment report provides some basic information on the extent of impaired water quality in the state.

Comment: Commentors concerned about the cost of new regulations. (RSCH) (RHW) (JELS2) (CAB) (JE) (AML) (SR) (JDH) (JT) (WM) (SL) (SM) (LF) (ML) (WB) (WJ) ((DCPP1) (GM) (JC) (JZ) (CD) (RDRO) (MLS) (DLK) (MLM) (JKU) (BAI) (GCA) (DHS) (TI) (JWM) (JTI) (LLA) (RD) (VAA) (ADP) (JTK) (DWD) (MLE) (RMA) (APE) (GT) (KHA) (DCPP2) (JTE) (NCB) (GCA) (JST) (JTK) (GSN) (NCB) (GSFP) (RMA) (JES) (DJN) (SKH) (LNI) (DL) (MEN)

Response: IDEM does not believe the draft rules will substantially increase costs to producers. Most of the provisions reflect management practices that producers should already have implemented to run a good operation. A fiscal analysis has been conducted and will be presented to the Water Pollution Control Board at the time of preliminary adoption and final adoption.

Comment: Commentors concerned about actions taken based on neighbor input relating to violations. (WBU) (DWA) (BJRO2) (GG) (DTH) (DA) (OK) (KK) (EP) (MFI) (DMO) (MGS) (KMB) (RH)

Response: The draft rules do not give neighbors of a confined feeding operation any authority to make determinations about the approval or management of a confined feeding operation. The draft rule does not affect a person's right to report problems at confined feeding operations, or to appeal decisions on approvals.

Comment: Increased liability of violations due to detailed rule requirements are a problem, including

mistakes or omissions as to written records and other management practices, even though no environmental harm results. (SCA) (SCM)

Response: As in all enforcement cases, IDEM considers the severity of the violation, including actual harm done by the violation in determining an enforcement response. Often, where so-called paperwork violations occur, simply pointing out the problem is enough to rectify the situation. The rule contains language which reflects IDEM's intent to seek correction of a paperwork violation and providing the producer some time to correct that problem prior to any formal enforcement.

Comment: I feel there should be rules to protect farmers and pork producers from nuisance lawsuits or even the threat of one. (TBA) If a person builds, purchases or otherwise moves into an area where a livestock operation exists, they should have no recourse. All costs of both plaintiff and defense on frivolous and nuisance lawsuits brought against an existing operation and not successfully won by the plaintiff should be born by the plaintiff. This should apply to state and federal agencies. (STF)

Response: Indiana's nuisance law can be found at IC 34-19-1-3, which is unaffected by this rulemaking. There is a limitation on nuisance actions for agricultural operations, which is found at IC 34-19-1-4. This statute provides that an agricultural operation in operation continuously for more than one year is not a nuisance if a number of criteria are met. The nuisance limitation does not apply whenever a nuisance results from negligent operation. IDEM enforces its rules through the civil enforcement process, rather than through the filing of lawsuits.

Comment: Commentors concerned that the rule language is vague or confusing. (DE) (JY) (DGFA) (BUF) (ST) (JDN) (FK) (MYA) (MBR) (KMB) (VF) (MSMO) (FG) (MSB)

Response: IDEM has worked extensively with the public to clarify certain provisions of the rule in subsequent versions of the draft. We will continue to revise the rule language to clarify the intent as specific questions arise. Written guidance, subject to public comment and input, is being written to explain and interpret the new rules. The rules and guidance will both provide a frame of reference that will guide both IDEM staff and the legal interpretations.

Comment: Commentors concerned about changes to rules or approvals without using the rulemaking process. (MSB) (AP) (EML1) (KRO) (RH) (MYA) (FCS) (JJA) (DLOW) (JN) (VS) (BUF)

Response: Any changes to the confined feeding rules, as they are adopted by the board, will be put through the full public process of rulemaking. However, the commissioner has the authority and discretion to require additional safeguards or requirements in approvals if deemed necessary to protect the waters of the state and prevent pollution from entering those waters under IC 13-18-3-7, IC 13-18-4-4, and the confined feeding statute at IC 13-18-10-2.1.

Comment: The word **Prevent** should be changed to **Minimize**. (AP) (DTS) (SRF) (KAK) (IPPA) (MSMO) (KGR) (RES)

Response: **Prevent** has been changed to **Minimize** in relation to leaks and seepage.

Comment: Suppose the weather report says 1/4 to **2** inch of rain. You haul manure on dry ground so

not to compact soil. But you get 6 inches of rain. So what does IDEM do? They say control the runoff. Now, how are you supposed to control runoff when everything is under water? (PMO)

Response: The draft rule attempts to address best management practices. If manure reaches waters of the state, it is an environmental problem and a violation. In all instances, whether it is in the rule or not, good judgement should be used when applying manure.

Comment: Wherever the words environmental and human health are used they should be replaced with water quality. (GC) (KYL) (PS) (DCPP) (VF) (JKI) (MBR) (SRF) (IFB) (SS) (EML1) (KGR) (IPPA) (ERE) (JJA) (JPM) (RY) The statement if deemed necessary to protect human health or the environment is open-ended. (BUF) (DTS) (SRF) (IBCA) (AML)(KH)(DCPP1)(MLB) (CAF) (CAB) (DHS) (JTK) (GSN)(DCPP2)

Response: The Water Pollution Control Board is authorized to adopt rules for the control and prevention of pollution in waters of Indiana with any substance that is deleterious to the public health under IC 13-18-3-1. The commissioner is charged with securing compliance with rules adopted by the board under IC 13-14-1-4. Although the standards in this rule are designed to protect water quality, the protection of water quality is necessary to protect human health and the environment. Any amendments to an approval shall be accompanied by a written reason for the amendments as stated in 327 IAC 16-7-5(c), and such a decision is appealable through the administrative appeal process.

Comment: Several times throughout the rules there are phrases such as other criteria, may require, if determined, or if applicable. How will it be determined when that is necessary or when will it be decided? (RN2) Who determines what is applicable? (DTS) Other criteria related to protection of human health or the environment, if deemed necessary and other areas identified by the commissioner are confusing, vague, too broad and leave too much discretion to commissioner. If someone thinks I am doing something wrong on my farm, he needs to explain it to me, not harass me or fine me. (JLSM)

Response: The term if applicable means that the provision only applies to those that make use of that system or process. For example, not everyone will market or distribute manure to others, but if they do, then such provisions do apply to them. Other criteria is used to allow the commissioner to consider new or unexpected situations that have bearing on the decision to be made. May require allows the commissioner to decide if the resulting action is necessary in a site specific situation. If decisions are made based on the flexibility in the rule, the producer will receive an explanation of the decision.

Comment: Delete language about waste management and substitute nutrient recycling. (LUE)

Response: In many cases, nutrient has been used instead of waste management. In others, waste management is the appropriate term.

Comment: I would rather see a partnership between the IDEM and local farm organizations rather than what seems to be the case. (IPPP) Education and outreach should be utilized to address management concerns. (IFB) We need adequate education on the new rules before implementation. (TS)

Response: It is IDEM's intent to work with local farm organizations, individual producers, and all

affected persons to the extent possible to provide education and guidance in relation to the confined feeding operation rules.

Comment: Commentors that want the rule to be developed with farmers and other organizations such as IPPA, Purdue, and IBCA. (NN) (PS) (RFA) (SH) (TSK) (JSM) (BMM) (WBU) (BDB) (ST) (MAB) (NF) (WVM) People that are truly informed (in terms of scientific facts, soil types, groundwater contamination, animal agriculture practices, engineering, etc.) should help make the decisions on regulations. (SEP) How can I, or anyone else have input on these regulations that seem to drift out of nowhere? What legislative body gives you or anyone else the authority of imposing regulations on farming or any other business? Where does the funding come from for this commission or office? Maybe that funding source can also pay the enlisted fees for tests and the extra recordkeeping on the farm. (DDE) I would like to know how many members of this committee have ever worked on a hog farm or raised hogs? (DTI) The draft rules need to be examined closely by more pork industry leaders and farmers before they become law. They are very restrictive and one-sided. (SFR) I am appalled that the draft was made with very little, if any, input from CFGs owners and operators. It seems it was drafted by the environmental extremists that have no scientific certainty about the rules that they are trying to enforce. (TCW)

Response: IDEM formed and has been meeting with the Confined Feeding Technical Workgroup since January 1998 to discuss these rules includes representatives of many organizations. The Indiana General Assembly has given IDEM the authority to develop rules for confined feeding operations in IC 13-18-10-4.

Comment: Funding for projects needs to be addressed. We would like to see a fair cost sharing for needed improvements. (KMOV) I hope regulations are not implemented before cost effective solutions are developed. (SEP) Financial and social considerations of the proposed rule are a problem. (SCA) (SCM)

Response: Rules are only a portion of the overall agency program relative to confined feeding operations. IDEM has also established a grant program to provide financial assistance and other state and federal programs are available to provide some financial and technical assistance.

Comment: Why can't one set of rules be sufficient, either State or Federal? (ED) The EPA and the USDA are coming out with rules shortly. Will Indiana producers have to follow your rules or the EPA's? Why should we do anything until the matter has been determined in court? (KH)

Response: IDEM believes that Indiana's program is functionally equivalent to the federal program. Since the release of the Final Federal Strategy in early March 1999, IDEM has met with EPA to discuss options. EPA believes that Indiana has a good regulatory program for AFOs but continues to suggest changes in order to satisfy their strategy and guidance. IDEM will continue to work with EPA to obtain a federally approved program. However, first and foremost, is the intention to have a state confined feeding program that makes common sense for Indiana. We are hopeful that ultimately the state program will be acceptable to EPA.

Comment: IDEM should not control what numbers a pork producer has on its property. (LD)

Response: IDEM does not control the number of animals at a confined feeding operation, but the legislature has utilized numbers to determine who must comply with the regulations.

Comment: Commentors that are concerned about enforcement actions for violations based on a potential discharge situation rather than an actual direct discharge. (JH) (DTS) (LN) (LLA) (CR) (RFE) (MYA) (RIF) (KSCH) (PDF) (CFI) We would like to see A violation@ replaced with direct discharge. (SRF)

Response: Under IC 13-30, a A threat to discharge@ is a violation. Also under IC 13-30, deposition upon the land of manure or contaminants which are not used for fertilizer or soil conditioner is a violation. If the manure is not used for its nutrient value then it is being disposed, which is prohibited. Under IAC 2-6.1 a spill which crosses property boundaries is a violation. The Agency assesses violations with respect to severity to determine if an enforcement action, letter of warning, or inspection report noting deficiencies to be corrected is appropriate. Of these actions, only a formal enforcement action carries a possible fine. During the last year all enforcement actions involved discharges to waters of the State.

Comment: Violation should state that it causes a discharge to water or human harm. (MSMO) We feel that everything is not to be considered a violation. (BUF) The expanded use of violation to things of incomplete records, maintenance records, land use agreements documents is very dangerous and not well thought out. (MHF) Some violations are of greater consequence than others are. Not every violation and in fact few are worthy of permit revocation. (JY)

Response: IDEM concurs that violations are different. History and severity of the violation determine the actions taken by the agency.

Comment: The current draft contains applicability sections in rules 3, 4, 5, 6, 9, and 10. To make it more user friendly, this section of Article 16 ought to indicate which parts of the article apply to existing facilities and which parts apply only to new facilities. (HEC)

Response: Due to the extensive changes to the draft rules, the individual rule applicability sections have been rearranged or deleted. There is a rule specific to existing operations at 327 IAC 16-6.

Comment: In 327 IAC 16-1-1, the following provisions should be added:

A(2) Any person who applies for approval to operate a confined feeding operation.

(3) The operator in responsible charge or control of a confined feeding operation@ (NCE)

Response: IDEM does not believe these provisions are necessary.

Comment: We propose that provision be made in the regulations for the public to petition IDEM for records regarding the implementation of the manure management plan for large operations. Given IDEM's minimal resources, it only makes sense to allow broad public access and participation in the oversight of large facilities. (NCE)

Response: Any records at IDEM are available to the public. Records kept at a confined feeding

operation are not available to the public unless released by the owner or operator of the operation. If a problem exists at any confined feeding operation, IDEM will investigate and review the records to resolve the problem, otherwise IDEM does not feel it is necessary to mandate that records for large operations be routinely provided to IDEM.

Comment: The rule should require that responsible parties certify to IDEM under penalty of perjury that the manure management plan was adhered to on an annual basis. (NCE)

Response: The manure management plan is a tool to assist the producer to handle and apply manure in a safe and beneficial manner. There may be times when it makes sense to make certain types of changes to the manure management plan. It is expected that if major changes are being made, the producer will submit an application for a new approval and a new manure management plan to IDEM, or if a minor change is made, the producer will ensure that it does not cause a threat to human health and the environment, and will keep a record of the change for review by an IDEM representative during an inspection. The statute does not provide the authority to require the certification requested by the commentor.

Comment: The responsible parties applying the manure must demonstrate that the land application of manure is being used to supply nutrients and not as a disposal method. (NCE)

Response: If the manure is applied in accordance with the agronomic rates, IDEM believes that it is being used to supply nutrients. If manure is applied in excess of the agronomic rates, IDEM will consider it disposal. Maintenance of the records required in the rule will provide the documentation that manure is being applied appropriately.

Comment: I believe you have to change rule #1 section 5 part 3 to be as it is in rule 1 section 5 part 1. (RML)

Response: IDEM is unsure of the language this comment refers to.

Comment: No one has addressed the difference between liquid manure, and solid manure or manure that has straw or some other form of bedding in it. (RSTE)

Response: The rule has design requirements for new liquid manure storage structures in 327 IAC 16-8-5, and design requirements applicable to solid manure storage structures in 327 IAC 16-8-8. The manure application setback distances also differentiate between liquid and solid manure in 327 IAC 16-10-4(a).

Comment: The proposed rule to send anyone who hauls manure to school to learn how is ridiculous. (GG)

Response: The draft rule does not contain any educational requirements.

Comment: Let's not overlook the obvious that animal agriculture is the number one user of feed grains. The creation of a hostile regulatory environment for animal agriculture diminishes the market for feed grains. The act of diminishing markets in agriculture quickly "snowballs" into a negative for the entire

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draft. In many instances, members from the agricultural community or others requested specific definitions in the rule to increase clarity and limit liability.

Comment: It is unreasonable to be able to change the rules at the end of every year and make the producers spend thousands of dollars in the form of time, upgrades and inspections when they have made investments already that take years to recoup. (JZ)

Response: IDEM does not intend to revise the rule annually. The Water Pollution Control Board rulemaking process generally requires more than one year to complete.

Comment: I feel we should do the following:

1. Identify the problem areas of Indiana.
2. Identify the major source of the water pollution in those areas regardless if its livestock, soil erosion or residential.
3. Work with those in that area to stop the pollution and correct damage.
4. Educate all residents to the sources and corrective measures needed to control pollution. (VAA)

Response: IDEM agrees and is working on a number of initiatives to meet these goals. The rules are one element of the overall effort to meet the state's water quality standards. Many other education, regulatory and voluntary efforts are underway by many people across the state to achieve the state's water quality goals.

Comment: If the goal is to protect the environment and the public, please find more farmer friendly and practical means. (VAA) When the little farmers leave that not only hurts those small farmers by it also hurts the entire local economy. (GSN)

Response: The goal of the confined feeding operation rules is to protect human health and the environment. IDEM has tried to propose requirements that will not pose a significant burden to farms that implement good manure management practices. The current version of the rule has been substantially revised from the initial versions prompting this comment.

Comment: If I apply manure at 4000 gal/acre and it moves 10 feet but does not degrade water, have I committed a violation? The draft clearly states that I have. (BDBF) I have numerous "sink-holes" on my farm. If a cow defecates near a sink hole in a rain storm, do you consider this pollution of Blue River? I certainly would not expect to have a concrete holding area draining into an active sink hole. (CL)

Response: The agency takes into consideration the actual impact of a violation in determining the appropriate enforcement action, if any. The rules apply to management of manure collected in a confined facility and does not apply to unconfined activities. The setback distances in 327 IAC 16-10-4(a) provide some flexibility in application practices. The setback from sinkholes with incorporation or injection is fifty (50) feet.

Comment: I would like to see IDEM give notification to any person or company moving in to an agricultural zoned area that they are in a setback area and would give up the right to sue a CFO if they smell or dust or anything might not be to their liking. (MSMO)

Response: Indiana nuisance law provides for an agricultural exemption for operations that meet the requirements of IC 34-19-1-4.

Comment: It is easier to add regulations as knowledge and experience prove the need than it is to go back and rewrite the laws that do not set the most sensible guidelines. (LLA)

Response: The confined feeding program in Indiana has been in existence for over 25 years. During this time, a great deal of knowledge and experience about confined feeding has been gained. Compliance inspections over the past two years have shown that there is a need to address the concerns from the manure generated at confined feeding operations. There is no difference between the statutory process for developing new regulations or for amending existing regulations.

Comment: The protection of waterways and karst topography is potentially a nightmare with the physical logistics of implementing a system of animal management, animal manure handling and application of manure. (JBR)

Response: IDEM concurs that it is very difficult to adequately protect the waters of the state in karst terrain, but believe it is an area worthy of protection.

Comment: The proposed sanctions are outrageous, the few documented cases of pollution caused by hog farms are usually the direct result of a natural disaster. (RRSO4)

Response: During 1998 and 1999, there were over 80 documented spills, none of which were from natural disasters. The primary causes of spills were lagoons overflowing, poor land application practices, and poorly designed open floors, which resulted in discharges.

Comment: If you are doing what you are doing to keep the Murphy Farms and Premium Standard Farms and this type of farm out of Indiana just say so. (MB)

Response: IDEM is not targeting specific agricultural operations within the state.

Threaten to Cause

Comment: Commentors that want the words **Threaten to cause** or **Threat to enter** to be taken out. (NSCH) (ANON6) (BF) (HLS) (MW) (TWF) (RB) (BS) (SK) (DD) (RME) (DTH) (GF) (HST) (HSM) (HSP) (HSRT) (HSB) (HSI) (HSCY) (PCG) (BVF) (LA) (RTE) (NN) (MG) (LT) (EJN) (CKD) (CK) (BAW) (DJN) (SKH) (LNI) (DL) (MEN) (AGRI) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DFS) (BLT) (DMB) (DP) (GMC) (GBR) (HE) (JO) (GJ) (NESS1) (NESS2) (WW) (RJMC) (RES) (DSL) (DGR) (CW) (AM) (DBA) (CWS) (JJ) (PS) (WLH) (PMC) (WLB) (BDB) (CVF) (JA) (RN1) (RN2) (KLK) (EML1) (EML2) (RJ) (MRE) (KL) (SRF) (BILF) (DS) (CRE) (JY)(CLF)(IPPA)(BG) (LK)

(KA) (MWC) (RHO) (DLSG) (LH) (LMG) (RFE) (CKO) (KWI) (ERE) (JER) (MK) (VF) (JTH) (BFA) (SFA) (CLE) (RRE) (LTR) (KS) (BJRO1) (ELW) (JKI) (JGS) (KGR) (RCU) (TBA) (TV) (WH) (TCZ) (GLM) (LLP1) (BGU) (AO) (JPM) (NCB) (JDH) (RR) (LF) (WJ) (DCPP1) (GM) (JC) (LN) (GSFP) (GSN) (DCPP2) (JKI) (RN1) Get rid of the phrase **A**threaten to cause@ and insert **A**when there is a problem@. (JL) Commentors that feel **A**threaten to cause@ is too vague or needs clarification. (SMC) (KEL)(OK) (MR) (MLR) (NG) (GSD) (CVF1) (KBB) (JJT) (BM) (DCPP) (KSCH) (RW) (FJ) (JJ) (LUE) (RSI) (SEL) (LM) (KHA) (DPO) (KMB) (DTS) (EP) **A**Threaten to cause@ would open up many areas for people to question any practices of pork producers. (JH) (BRS) (JLA) (IPPA) (RTJ) (DHF) (AP) (TS) (CAD) (BW) (GC) (DW) (DZ) (MLW) (SW) (SGP) (DF) (KD) (CM) (HMC) (JLW) (MB) (BR) (SCA) (SCM) (JLS) (MSB) (SCA) (SCM) (JLB) (SRF1) (NK) (WPF) (ANON5) (ABT2) (DSCHN) (BMM) (SV) (JLEM) (CVF1) **A**Threaten to cause@ is subjective and leaves the producer not knowing what performance standard he is expected to meet. (IFB) **A**Threatens@ is not science-based. (BBA) (RFE) Threaten to cause is a problem. (DR) (APA) (DGFA) (JOY) CFO= cannot be held responsible for the accusations of the threat to water quality and public health. (BRJ) (DJ) Why should producers prove to citizens and IDEM that we are not a threat? (DGRE) Perceptions of threats to water quality or public health should have no bearing on the issuance of permits, law making, or rule enforcement. (BLA) The rules should not afford other persons the opportunity to procedurally delay a CFO based on **A**threats@. (RFE) **A** **A**threat to cause@ is not a violation. (FCS) (BUF) If all building regulations are met you shouldnt need this. (MSMO) Not sure why you are using this. (MY) The pork producer should receive a warning so that he can correct the problem. (DKI) Any references to **A**threatens to cause@, **A**potentially contaminate@, or equivalent phrases are unjust in that in no case is water quality damaged. (GFL) (DC) (BSCH) (MMC) (RAR) (IBCA) (CLR) (WSJ) (AML) (SR) (JHO) (JT) (MMO) (KC) (DCPP1) (JC) (JZ) (MLB) (MLS) (DLK) (LN) (GCA) (CAB) (VAA) (DTR) (JTK) (DWD) (MLE) (APE) (JDE) (DCPP2) **A**Potentially contaminate@ should be removed. (JKI) (RN1) (MFI) In 327 IAC 16-3-1(c) the term **A**potentially contaminated run-off, and spills, including seepage or leakage@ should be deleted. (KGR) Are we to activate an emergency response to a maybe situation and risk being fined if we dont contain something that might have been contaminated? (JLEM) Any references to **A**threatens to cause@, **A**potentially contaminate@, or equivalent phrases should be defined. (RY) **A**Potentially contaminated run-off and spills including seepage or leakage@ exceeds the definition of a discharge. It also makes the operators unreasonably vulnerable to harassment with the term potential. (SRF) In 327 IAC 16-3-1, the wording is unacceptable. **A**Threaten to cause, potentially contaminated run-off, or threatening to ente@ are all big judgement calls. I do not see how all judgements could be equal and fair from one day to the next. (RJB) **A**Threaten to cause@ and potentially contaminate@ establish a performance standard beyond water quality. These phrases should be replaced with a phrase like **A**protect water quality@. (ICARD) (DLS) (IPPA) How can someone be fined for potential contamination? It seems to me that first they should be given a chance to make corrections, without fines. (GWB) In 327 IAC 16-3-1(c), the phrase **A**potentially contaminated run-off and spills including seepage or leakage@ exceeds the definition of a discharge. A small seepage or leak in a storage structure with dirt around it is not a discharge into waters of the state. (LH) (MSMO) (DTS) This provision exceeds the definition of discharge and should be moved to guidance. (IPPA) In 327 IAC 16-3-1(d), the term **A**threatening to enter waters of the stat@ is to open ended. This should be stated creeks or rivers, not just any water running across the land. (DE) This provision is too open-ended and should be defined or deleted. (IPPA) In 327 IAC 16-3-1(d), the term **A**threatening to ente@ should be deleted. (KGR) In relation to the use of **A**threat@, non-farm people that build a home across from an established feeding operation need to be willing to accept the sights and smells of country living. (BDM) There is no need to give neighbors expanded rights to accuse me of a threat if one does not exist. It causes tension between neighbors and an added expense to defend myself if I am in

compliance. If you want this kind of language then we should have some rights if we are not at fault. The neighbor should have some facts before he accuses me of wrong doing, not assumptions. (SL) (ML) (RV) (LN) (JKU) (FG) (TI) (JST) (RD) (WOF) (ADP) (MAB) (APE) (DPO) (JTE)

Response: IDEM has removed the ~~A~~threat to cause~~@~~ language, however, ~~A~~threaten to cause~~@~~ is a prohibited act under IC 13-30-2-1(1) which states that a person may not ~~A~~discharge, emit, cause, allow, or threaten to discharge, emit, cause, or allow any contaminant or waste, including any noxious odor, either alone or in combination with contaminants from other sources, into . . . the environment . . .~~@~~. This statute does not target confined feeding operations but applies to all activities within the state, be they industrial, municipal, agricultural, or residential. The phrase ~~A~~potentially contaminated runoff~~@~~ has been deleted. The phrase ~~A~~threatens to cause~~@~~ has been removed except for in the definition of ~~A~~waters~~@~~ in 327 IAC 16-2-46, which is a statutory definition. ~~A~~Threaten to enter~~@~~ is used in 327 IAC 16-3-1(e). Guidance will describe criteria to be used by inspectors. There will also be a guidance document for the owner/operators that presents the operational requirements in less technical terms. It is IDEM goal to prescribe in as clear and concise terms as possible what the expectations for compliance include. The inspectors must follow up on complaints, however, the inspectors are diligent in ascertaining if there is actually a water quality problem.

Comment: The phrase ~~A~~potentially affected person~~@~~ is not defined. (RFE)

Response: This phrase is common to many of IDEM's regulations and attempts to further define it have proven problematic because its interpretation can be case-specific. The agency has instituted a process to provide notice to individuals who may be potentially affected that has survived legal challenge.

Flexibility

Comment: Commentors that want flexibility to use new or alternate technology or methods. (DZ) (EML1) (BGUE) (KL) (TB) (SMO) We need flexibility in deciding management practices to maintain profitable but responsible operation. We believe each site should dictate parameters and be engineered to meet those needs, not solely to satisfy IDEM requirements. (TS) We need more latitude in changing acres for spreading. We would like to spread our water based on good agronomic information. The rules are so binding and heavy-handed that new acreage, information, science and technology are not utilized or even examined for fear of ~~A~~opening up~~@~~ our permit. There are new and better ways of doing things, but we are losing trust in you to allow us to try innovative technologies. (MDK) New technology must have a place in these regulations and must be evaluated by a science based panel of experts, not just the Commissioner. The statement that ~~A~~exceptions must be documented with demonstration that it will provide equivalent environmental and human health protection~~@~~ is too vague and does not adequately provide for science based evaluations. (BM) New manure management systems should have the flexibility to be designed for that specific location. (DTS) With the new rules you leave no room to try new ways as the grass ways in lagoons or applying manure diluted with water in center pivots by drips. (CRE) We need to be able to change with technology, prices, weather and soil types a lot faster than any government agency can move. Give us help and guidelines. When we deliberately pollute - fine us but don't tie our hands. One rule for spreading manure on all soil types and farms will not work. (LB) IDEM has shown foresight in allowing for alternative designs and innovative technology, but we question the detail and depth of the language which may be too cumbersome to understand or too detailed to comply with. (IPPA) Why is IDEM moving away from a performance

based system that allows owner/operators to be creative in developing manure management systems that truly worked best for them to a more rigid demanding rule structure that makes many management decisions for CFO owners/operators that will make designing, building and operating CFOs more costly and less efficient. (RY) The proposed rules are too prescriptive. They give us a standard to follow and then tell us step-by-step how the standard should be met. If a producer can find an innovative method to meet the standard why should he/she be boxed in by the rule? Set the performance standards for construction and then provide the "recommendations" in the guidance document. Wording such as "A confined feeding operation shall be conducted in a manner that minimized non-point source pollution entering bodies of water, makes a lot of sense. (IBCA)(CLR) (JDH) (JS) (CAB) (DHS) (LLA) (PJH) (SEL) (NF) (BDBF) (GSN) 327 IAC 16-7-3 Setbacks ... Strongly support flexibility in setbacks, both from a departmental and producer perspective. (BE) Few measurable standards are given in the proposed rules. The rules should allow responsible, creative management to attain scientifically-based performance standards. Responsible, on-site management of the confined feeding operation will be superior to distanced, bureaucratic management. One size does not fit all. (CAF) Provide some leniency to older and smaller operations. (JL) Agriculture is a zero-discharge industry, except in the case of a 25-year/24-hour storm event. The proposed rules are too prescriptive. If I can find an innovative method to meet the standard why should I be boxed in by the rule? Set the performance standards for construction and then provide the recommendations in the guidance document. Wording such as "A confined feeding operation shall be conducted in a manner that minimizes non-point source pollution entering bodies of water, makes a lot of sense. (GFL) (DC) (CREG) It should be left up to the producer to manage his operation to accomplish zero-discharge. (GR) Some of these rules say that everyone must do everything the same way. It would be better if you placed performance guides that the producer had to attain in his own way. (KH) (VFA) (CAF) (GSN)

Response: 327 IAC 16-5 on alternate design or compliance approaches, and innovative technology allows flexibility to meet the performance standards in a different way than outlined in the rule.

Comment: Has IDEM performed a cost analysis for the new rules? How much will these rules add to the cost of a market hog? We have been informed that the use of a nitrogen gauge is not acceptable. This is something that needs to be allowed along with the application rates and location determined by soil types and tests. (JH)

Response: IDEM has performed a fiscal analysis of these rules and provided that information to the Legislative Services Agency. LSA must provide a fiscal analysis to the Water Pollution Control Board at both the preliminary and final adoption hearings. IDEM continues to be open to discussion about acceptable management practices.

Comment: 327 IAC 16-4 is very welcome and offers the thought that there may be a better way. (CLE) We do appreciate rule 4 that allows alternative design. (KSCH)

Response: IDEM concurs that the flexibility provided by this provision allows for improved ways of meeting the rule requirements.

Comment: 317 IAC 16-4-1 Alternate design or compliance approach. Sec.1 (b)(4) Should not need to provide "additional" protection but rather "equivalent" protection. If it meets the performance standard, equivalence is sufficient. (IBCA)

Response: The alternate design or compliance approach is now listed in 327 IAC 16-5-1. The draft rule does not require ~~Additional~~ protection to be approved; however, there may be different requirements to ensure compliance with the performance standards in 327 IAC 16-3-1 depending on the proposal for a different design or approach.

Comment: There needs to be some type of clause that deals with ~~Acts of God~~, such as fire, tornado, floods or unusual heavy rainfall. (PS) There needs to be a provision which addresses malicious acts against an operation or acts of God that cause contamination to occur. (IBCA)

Response: The agency in implementing rules takes such situations into account in evaluating compliance with rules.

Comment: In 327 IAC 16-4-1(b), in making a determination about alternate design approaches, the commissioner should consider:

1. the amount of untreated manure to be stored on site at any given time
2. the degree of pathogen removal that will be achieved and
3. the degree of odor reduction that can be expected.

(HEC)

Response: Treatment of manure and pathogen removal are operational practices that can be considered under 327 IAC 16-5-1. Odor reduction is not within the scope of this rule.

Comment: 327 IAC 16-4-1(c) seems to be a repeat of section (a) and should be deleted. (HEC)

Response: IDEM concurs and has deleted the provision in (c).

Size

Comment: Commentors concerned that the rules will apply to all animal feeding operations. (IPPA) (BJ) (SF) (CJ) (MWG) (TBA) (BR) (PCG) (RIF) (DHF) (AS) (FJ) (WVM) (RST) (WLB) (NEF) (JELS1) (LHA) (ANON5) (GBU) (JLEM) (CR) (CLF) (NCB) (JAK) The rules could effect everyone who has goats, lambs, horses and even dogs in the state of Indiana. Do you have the resources, manpower and money to enforce this law? (RML) In the confined feeding definition of size to be regulated, 600 swine is not a fair regulatory size when compared to cattle as 300 head. Waste produced should be proportionate. A better number would be 1,000 head of swine. (BM) Under the proposed rule, all operations will now be viewed under a significantly more critical view. A violation has always been considered a discharge to waters of the state, however, under today's interpretation, a violation is not only a direct discharge, but it can be a threat to violate, a failure to manage an operation appropriately, a failure to keep records, a rodent hole or lack of adequate vegetation and so on. There

does not have to be a discharge to water. IPPA maintains that applicability to an operation under the threshold numbers needs to be an enforceable violation of causing a discharge to waters of the state. As written today, this provision allows IDEM to regulate at will the entire pork industry regardless of size. (IPPA) I feel in your rules defining a confined feeding operation, that any operation no matter the size should be included. Even a small operation could produce 10 cubic feet or 2000 gallons of liquid. You shouldn't penalize some and not the rest. (TI) In 327 IAC 16-1-1(a)(4), we are concerned about the word "any". Our understanding of IDEM permits is that they regulate herds of 600 head or larger. This would control the entire industry. (BUF)

Response: The 1971 Confined Feeding Control Law (CFCL) specifies when an existing or proposed farm must comply with the law. The CFCL requires a confined feeding approval for operations with 300 or more cattle, 600 or more swine or sheep or 30,000 or more fowl in a confined area for at least 45 days during any 12-month period; and that ground cover is not sustained over at least 50 % of the confinement area.

Comment: I have no quarrel with your ability to go after people of any size who have caused a violation of harmful size. I have a problem with your ability to disseminate knowledge to these producers who think they have no rules to follow. You really need to educate these people. (SMC)

Response: In addition to the outreach efforts underway as a result of this rulemaking, IDEM is working with all stakeholders, including the Indiana Farm Bureau, Purdue University, NRCS, and the various industry representatives to provide education on the confined feeding program throughout the state.

Comment: Limit the size of the mega operations. 5000 animals at a time is large enough. (GG) I cannot concede that a figure of 600 head or more should be a large operation. Most of the problems have occurred because of operations that exceed 10,000 head of hogs per year. (GWB) The small or family owned operation does not have the great impact that the large or mega sow operation does. (EHB) Maybe the route you should look at is to limit the number of animals that you can have on a farm so corporations don't dominate an area of the economy that is vital. (BJRO1) I understand that the huge mega-corporate hog farms probably do pollute and should be held accountable for the thousands of hogs produced in a small area. The trouble is you apply the rules for the big mega-corporate hog farm and those rules apply to the small farms too and that is wrong. (JE) (SHB) I really have no problem with these rules applying to anyone that has confined feeding or has a violation. There may be actually more of a problem with these smaller operation than the ones of 600 head or larger. (WSJ) Maybe you should consider setting the animal units higher. (CMI) Smaller operations can let their entire barnyard run straight into the river. Gardeners apply too much chemicals. Because of our size, we larger farms are targeted. (DMO) Please don't penalize the small family farm to try to regulate the large ones. (WSF) We propose using the concept of animal units to differentiate between small and large operations. Large operations require more stringent regulations for design of manure storage structures, air emissions, and odor problems. We also propose that they be constructed according to volume constraints that reflect the most structurally sound approach for each site. (NCE) The proposed rule should differentiate between larger confined feeding operations (with 1000 animal units or more) with higher potential for environmental damage and smaller ones with less potential risk. At a minimum, these larger operations should be required to have their manure storage structures inspected before use, to install monitoring wells, and to obtain an NPDES permit. (HEC)

Response: The agency recognizes the potential for harm increases with the increase in the amount of manure generated and has included provisions to address such concerns. There is also a recognition that even small farms can have an adverse impact if manure is discharged into surface or ground water. The rules try to establish a framework that provides for adequate protection for all size of operations covered by the rule.

Comment: There should be provisions included in the proposed regulation that take into account pigs that are not fully grown based on a percentage of hog animal units. (NCE)

Response: IDEM has used the same animal unit system in place nationally.

Timeframe

Comment: I understand that it will likely be the end of 1999 before this Draft Rule becomes law. If that's so, I must be in compliance by the following July; during a time when I'm busy getting my crops planted. You must extend the compliance deadline to July 2001. (NSCH) (ANON6) (BF) (HLS) (MW) (TWF) (DBA) (BS) (M&E) (BH) (DTH) (CRE) (GF) (HST) (HSM) (SSF) (RBI) (HSP) (HSRT) (HSB) (HSI) (HSCY) (BVF) (LA) (RTE) (LT) (RW) (EJN) (BAW) (AGRI) (ICARD) (NESS2) (AP) (JA) (IPPA) (EML1) (MRE) (LK) (KA) (RHN) (HF) (RSF) (LTR) (JGS) (CVF1) (BGU) The time frame/deadline of July 2000 is too soon. (RTJ) (RJB) (WVM) (CVF) (KSCH) The timeframe to implement is unrealistic. (BR) (SCA) (SCM) (LP) (WCV) (TFA) (JLEM) (GLM) I would suggest at least January 2001. (BRS) The timetable you have set up to implement the new rules is fine for new operations, but for operations in existence you need to extend the timetable. The winter would be a better time for the new rules to go into effect Jan 1, 2001. (WSJ) (TI) (BE) (KHA) The time that the law takes affect does not give a pork producer sufficient time to implement changes and be in compliance before the law is broken. (JDN) Give producers a minimum of one year to come into compliance if these rules are implemented. (DHF) (IFB) (LMG) I understand that once the draft rules become law, we have only 6 months to get into compliance. We need at least 2 years. (MG) (ELW) (KGR) The proposed July 1, 2000 compliance date for owners and operators of existing confined feeding operations should be changed to at least December 31, 2000. (RES) The deadline should be extended to no earlier than December 2001. (RD) Would suggest July 2001 as a more appropriate time to be in compliance. (DWD) July is a very busy time of year for farmers. (WLH) (RHO) (MK) You must extend the compliance deadline to July, 2002. (WLB) The implementation date for the rule should be moved back an additional year to allow the pork industry time to recover from the current situation in pork economics. (IFB) Please extend the draft period. (FS3) The deadline should be extended. (CKO) (DHB) (RIF) (RY) IDEM should consider making grants to farmers or moving the compliance date to, at the earliest, December 2001. (BMM) IDEM needs to give more consideration to its timetable for producers to be educated of new requirements. They will need at least 18-24 months from acceptance of new rules. (PDF) (CFI) Wouldn't it make sense to give producers approximately 3 to 5 years to bring their production facilities up to code? (SSC) Your timing if implementing this law in July make no sense at all, when do you think we are the busiest? (SR) I would request that the Indiana pork industry be given as much time as possible to implement whatever rules are adopted. (JDH) (MLS)

Response: IDEM believes that some requirements, as described in 327 IAC 16-6-1(b), can be complied with when the rule becomes effective. A compliance schedule has been included in 327 IAC 16-1-2 to accommodate delayed effective dates for certain provisions if necessary.

Comment: The timetable is too short. IPPA will need more than 6 months after the final rules are enacted to develop and implement an educational program for producers. The increased timetable will also allow IDEM to notify and educate all of the other government agencies (Soil and Water, IDNR, etc.) who will be assisting in providing support for compliance. (SHDL) IDEM should utilize their compliance and technical assistance program personnel to assist and provide education and compliance assistance to producers. (IFB) Any new regulation that adds unnecessary expense and stress to my family that can be eliminated or delayed would be helpful. We still need time to learn, time to adjust, time to carry out, time to afford and finance these changes. (LLA)

Response: It is IDEM's intent to provide adequate time for compliance for all confined feeding operations. After a rule is final adopted by the water pollution control board, the rule must go through an approval process, which normally takes at least three months. The rules are generally effective thirty days after filing with the secretary of state. Therefore, the rules will not be effective until at least three months after the water pollution control board finally adopts them. IDEM has included many organizations from the beginning of the rule development process in January 1998 to get their input as well as to allow organizations like IPPA, NRCS, Purdue, etc., to work on education and outreach for their constituents as early as possible. A compliance schedule has been provided in the rule for certain key, new requirements.

Comment: We support the timetable for implementation specified in subsection (c), but there seems to be an error since we cannot determine where section 16-9 subdivisions (1)(A, C, and D) are located. Which sections? (HEC) 327 IAC 16-5-1(b) In that existing operators will be more difficult to locate, inform and update about news rules than a person seeking a new application period for compliance should be extended to 12 months. (c)(1) Due to the timetable of the final publication and effective date of the rule, it would be better to provide a time period from effective date rather than a specific date such as that proposed in the draft. We would again recommend 12 months for simplicity sake. (c)(2) It will be nearly impossible to ensure that operational requirements and manure application requirements will followed on the effective date of the rule. Again, the phase in period should be 12 months, with every effort make to bring them into full compliance as soon as possible. (IBCA) 327 IAC 16-9-6; In (a) the ease of compliance is easy in that a new approval will be done in accordance with the new rules. However, since existing, approved operations have not been subject to changing rules they will need more time to be notified, educated, and informed of the new requirements. We recommend changing the timing of compliance from a specific date (July 1, 2000) to "twelve (12) months from the effective date of the rule." (IBCA)

Response: The requirements have been changed for simplicity. They are now in 327 IAC 16-6-1(b).

Comment: I recommend you remove a lot of the proposed restrictions and then have an extended trial period, with producer input, before implementing them. (OK) I would like to ask you to reconsider these rules, and to delay the deadline of implementing these rules until there is sufficient evidence to prove the extent of these rules. (DK) We need to delay the OK of these guidelines. They need more work and changes, or else small livestock operations will be forced out of business. (FK) I think you had better reconsider some of these items. (RP)

Response: The workgroup has provided a lot of input. A lot of revisions have been made to the rule to address implementation concerns.

Comment: IDEM should extend the comment period for a period of six months until June 30, 1999 to allow producers to comment adequately during this difficult economic time for Indiana agriculture. During this time, it is imperative that IDEM meet with producers across the state to dialogue with representatives of animal agriculture about the proposed rule. (ICARD) Most farmer don't like to take the time to write letters anyway and right now is not a very good time. I think if you could extend the deadline by a few months there might be more producers that would respond. (LM)

Response: We have continued to work with individuals and producer groups throughout 1999 and will continue to do so through preliminary and final adoption in 2000/2001.

Hazardous Waste

Comment: Commentors that do not want manure regulated as hazardous waste. (RCL) (CJ) (SCA) (SCM) (JLB) (LP) (LUL) (CAD) (WH) (TCZ) (CVF1) (MCSW) (PW) (RW) (BR) (HMC) (DGRE) (RFE) (BOGU) (MHF) (MSM) (DHF) (MWL) (BWA) (RC) (NP) (KLK) (BHO) (CKO) (BUF) (WOF) (BDBF) Use new technology to solve environmental problems. If manure is hazardous, find ways to treat it to remove the odor and other dangers. Use the money spent to make and enforce regulations to find practical solutions. (GG) Manure is not a hazardous waste. It is a concentrated fertilizer. Do not require the same handling and transportation guideline for manure as you do for fuel or chemicals. (SL) (ML) (LN) (GCA) (JWM) (JTI) This puts us on the same playing field as nuclear energy or nuclear power plants. The swine industry is not structured in a manner that allows us to pass on a cost. (JST) (LLA) Some of the proposed rules for handling manure and notifying neighbors of its content makes it sound like nuclear waste. There is more language in here establishing manure as a hazardous material than most commercial fertilizer has. We need to encourage proper nutrient application, not discourage recycling manure. (DZ) I find that some of your regulations on storage and handling manure are the same as used for hazardous wastes. (I have some knowledge of this). If manure is a hazardous waste then all hog farmers would already be dead and we wouldn't be worrying about this. (NG) You are requiring lagoons to be built to the standards of hazardous waste facilities. You are treating manure as a very dangerous, toxic waste product. It is not. (JLEM)

Response: This rule does not equate manure with hazardous waste. However, manure can be harmful to human health and the environment. Therefore, the rule continues Indiana's "zero discharge" standard and places performance standards, design, construction and operational requirements in order to avoid discharges.

Air Quality Issues

Comment: Regulations on odor and air quality are desperately needed. (BLC)

Response: Some odor control recommendations will be addressed in the guidance being developed. Specific questions should be addressed to a Cooperative Extension Service agent or local NRCS office.

Comment: IDEM continues to show their determination to address issues outside their authority, such as odor and local zoning. (BJ) (PCG) (SCA) (SCM) Who gave IDEM the authority to get involved with local zoning and odor control? (MSB) (RW) (DBR) IDEM is responsible for maintaining water quality, not odor control. Any mention of odor provisions should be stricken from this draft. (DJN) (SKH)

(LNI) (DL) (MEN) IDEM does not have jurisdiction on air quality/odor. (JJA) (MSMO) (DTS) Odor should really not be a factor. (JTH) Producers have no recourse if the neighbors appeal an application for no reason other than odor. There should be something written in the rules that help protect the producer. (LTR) If no neighbors live near my fields, these fields should not be subjected to unnecessary odor rules. (DJL) If IDEM does not have jurisdiction over odors, then no changes to setbacks, location of buildings, or spreading of wastes should be effected by odor concerns, only by water quality. (GS) Incorporation within 24 hours and setback distances from property lines and public roads appear to me as being an attempt to regulate odor control instead of protecting water quality. This is an area in which your department has no authority. (JPM) The people that complain about livestock farms are 99.9% complaining about odor, not water pollution. IDEM has no authority over odor management. (RC) I am concerned with the language that the commissioner may require a greater setback distance, this gives the commissioner the leeway to regulate odor. (DTS)

Response: The draft rule does not regulate odor or air emissions generated at confined feeding operations. The intent is to allow IDEM to consider site specific conditions that may warrant increased setbacks to protect sensitive waters and human health. Some best management practices such as shorter setbacks for incorporation or injection have been incorporated to address the problem. The guidance may contain specific recommendations for odor control/reduction. The provision about local zoning has been deleted, though compliance with all local zoning requirements is still necessary.

Comment: People who contest the approval of an operation should: (1) be from the area; (2) have an effected area; (3) have limited time for their complaint; and (4) be required to economically compensate the producers where no reason for delay exists. (BLA)

Response: The appeals process set forth in IC 4-21.5 provides the requirements for appeal of an agency action. There are also timeframes built into the statutes regarding time for appeal.

Comment: We propose that IDEM include in the rule Best Management Practices (BMP) and establish a health-based emission standard as in Minnesota for lagoons servicing 1,000 animal units or greater. These may include lagoon covers, and covers over areas where manure is mixed or moving. We propose the following methods for achieving BMP for hog operations: composting, rotating hogs on pasture land to avoid runoff, and avoiding the formation of liquid manure through outside grazing practices and hoop technology which requires thick bedding. (NCE)

Response: A guidance document will accompany the rule. It will give specific information about how to comply with the rule. Also, educational and assistance materials will be developed for instructional purposes. These documents will be used to help the public understand about agricultural operations.

Comment: In 327 IAC 16-7-3(a), add: A(a) Except for subsection (g)...@. Add a new (g) to read as follows:

(g) The construction of uncovered anaerobic lagoons are prohibited within two miles of:

(1) a residence;

(2) a school;

- (3) a business, other than a farm;
- (4) a federal, state, municipal, or county park;
- (5) other public meeting places.

(NCE)

Response: IDEM is not establishing odor related setbacks in this draft rule.

Liability

Comment: The owner and operator situation is not clear. Actually there may be a facilities owner, an inventory owner, and an operator. They each should be liable in certain situations. (C&C) The owner and operator may not be the same person. (WVM) We are not sure exactly what this rule says and who is liable and when it is to occur, this rule is written for lawyers. (SRF) The requirements in 327 IAC 16-5-1(c) should be required of the owner or operator, but not both. (KGR) In rule 5, existing confined feeding operations, it states both owner and operator must comply with these requirements. I feel it should be owner only, they should not have joint liability. (TI) All contributors to an environmental problem should be held equitably accountable. I believe that farmers need assurance that all contributor to inadequate water quality are held accountable and that the farmer is treated fairly. (JST) Liability has not been adequately addressed in the rule. We suggest placing responsibility on the owner of the livestock and on corporations whose contracts prescribe the type of animal and dictate the parameters of the operation. (NCE) In 327 IAC 16-5, by including the owner and operator, IDEM is implying joint liability issues that will potentially cause problems with contract law. This should be changed to owner and/or operator. (IPPA) We are concerned about the joint liability of owner and operator in rule 5. In many instances it will be important for one party to take responsibility. (KSCH)

Response: At a leased operation, both the lessor (landlord), as the owner of the operation, and the lessee (tenant), as the operator of the operation, would both be held responsible for compliance with the confined feeding law and rules, including upkeep and manure removal. The owner and operator are also ultimately responsible for any violations caused by a contracted manure spreading service, although legal action may also be taken against the contractor. The owner and operator would also remain responsible for any violations in design and construction at a CFO and any resulting leakage. In the case of the gift or sale of manure from a CFO to another party, an owner or operator could still be held liable for any violations resulting from improper use of the manure contingent upon the specifics of the particular situation. The language has been changed to owner/operator to clarify the situation.

Commercial Fertilizer, Etc.

Comment: We feel there is more pollution done by commercial fertilizer and chemicals put on farm ground than manure. (TTF) Why doesn't IDEM have the same restrictions on setbacks and application of commercial fertilizers as are proposed for organic natural fertilizer? (TCW) In some fields we have to buy commercial fertilizer because of your setback rules. Can you and soil and water department get

your act together? (BGU) Everything I read and hear at briefings only talks about manure problems, what about commercial fertilizer? (ED) If the intent is to control or regulate nutrient application then why aren't the proposed regulations applicable to commercial fertilizer application as well? (EP)

Response: Although Indiana does not have a specific regulatory program governing the application of commercial fertilizers, they must be applied in compliance with the Environmental Management Act, IC 13-30. The State Chemists office regulates the sale and storage of commercial fertilizers. IDEM recognizes that the use of manure for fertilization purposes involves the application of significantly larger quantities of material per acre compared to the quantities of fertilizer per acre to get the same result. Manures also contain bacteria and other microorganisms that have the potential to cause human illness if the manure enters an aquifer or well.

Comment: I believe that the impact of these issues is minimal compared to the impact of inadequate urban and suburban septic/sewage management. It seems that the households and municipalities are held to a lower standard than the pork producer. (JST) (LLA)

Response: IDEM has rules which cover industry, residential and municipal environmental concerns. All rules created by IDEM must be reevaluated every 7 years. Under the Clean Water Act, point source discharges must be regulated under a National Pollutant Discharge Elimination System (NPDES) permit. Wastewater treatment plants and combined sewer overflows are regulated under individual NPDES permits and must meet all water quality standards or are in violation. The 1994 Combined Sewer Overflow Policy provides the framework to bring combined sewer overflows into compliance under the NPDES system. The rules governing individual NPDES permits and land application of human waste are much stricter than the proposed confined feeding rule. A confined feeding operation which treats its waste could apply for an individual NPDES permit to discharge if they so choose.

Comment: If a sewage treatment plant is hit by a big flood and couldn't treat the sewage it went straight into the river. I don't think this should be common practice, but why can a sewage plant discharge to a stream and not me? (LM) (JTE) Why can city departments discharge into streams? Why don't they have to have adequate equipment to control when we get big rains? (BILF)

Response: Sewage treatment plants have permits, which they must comply with. IDEM recognizes that there are other sources of water pollution and is working with municipalities to develop solutions to the combined sewer overflow systems so prevalent in Indiana as well as other issues that affect state water quality. IDEM recognizes certain acts of God circumstances, but to the extent that these types of problems can be foreseen and planned for, environmental devastation that occurs from these acts can be minimized. There is an agricultural exemption for the 25-year, 24-hour storm.

Comment: Livestock producers should be held to the same standards as other industries, golf courses, home owners, crop farmers or municipalities, but not substantially higher standards. (SEP)

Response: IDEM believes that the standards being developed reasonably take into account the many interests concerned with this rule. Because confined feeding is a zero discharge industry, no discharge is allowed without a permit. At the point at which a confined feeding operation discharges into a water of the state, an NPDES permit is required, just as it is with any discharger to a water of the state.

Performance Standards

Comment: We support the concept of performance standards, but we are concerned that they may not be enforceable as written. Performance standards should explicitly state that any unpermitted discharge from a point source or non-point source that causes a violation of Indiana water quality standards may be subject to enforcement action. (HEC) Manure should never be allowed to enter a naturally established water flow. (STF)

Response: IC 13-30 statutorily allows IDEM to investigate and enforce against any unauthorized discharge into the waters of the state. The enforcement statutes apply regardless of whether they are cited in the rule itself. Manure is prohibited from entering waters of the state.

Comment: Performance standards should include a statement that requires the operator to demonstrate that manure is being land applied at rates consistent with plant nutrition, not disposal rates. This will provide flexibility in the manure management plan along with a measure of enforceability. (HEC)

Response: Manure application must be based on agronomic rates for potentially available nitrogen as described in 327 IAC 16-10-1(a)(2).

Comment: IDEM should set water quality standards for CFOs and let producers and engineers establish the best methods to do the job of protecting the environment, utilizing waste as a crop nutrient and protecting the rights of my neighbor to use and enjoy their property as they want. (DFA)

Response: IDEM has included a number of areas where flexibility is employed to allow each producer to run his or her operation in a manner most efficient to that operation as long as there is environmental protection equivalent to those standards provided in the rule.

Comment: 327 IAC 16-3-1; (c) ... "Potentially contaminated runoff" ... cannot be controlled or move across property lines. (e)(2) should be deleted because if (1) is complied with, (2) is irrelevant. (IBCA) The following rule needs to be clarified or revised: 327 IAC 16-3-1(c) Performance standards; potentially contaminate, anything existing could contaminate. (BL)

Response: IDEM has deleted all references to potentially contaminated runoff.

Comment: 327 IAC 16-3-1; (b) should be rewritten to state, A confined feeding operation shall be conducted in a manner that minimizes nonpoint source pollution entering bodies of water. (IBCA)

Response: IDEM concurs and has made the suggested change.

Comment: The spill and leak tolerance is not realistic. The operator aims to put the animal waste where it will benefit him/her most. It would be more realistic to address lack of remediation upon an occurrence rather than the punitive overtures contained in the zero tolerance writing. (NCB) (JC) (GSFP) (JES) No seepage or leakage of manure from your operation at any time no matter if it enters the water of the State or not. Are pet owners going to be fined for letting their pets take a crap outside too? (JTE)

Response: The rule states ~~A~~prevent leaks or excessive application of liquid manure. The draft rule does not apply to pets.

Definitions

Comment: The following terms should be defined: ~~A~~highly erodible land~~@~~, ~~A~~highly permeable soils~~@~~, and ~~A~~high water table~~@~~. (STV)

Response: Highly erodible land is defined in 327 IAC 16-2-18.

Comment: In relation to the definition of ~~A~~agronomic rate~~@~~ in 327 IAC 16-2-1, I don't think the State of Indiana now knows more about agronomy and agronomic needs of my farm than my agronomist or the agronomist at Purdue University. (JMC) The definition for agronomic rate should specify absolute limit for application of both nitrogen and phosphorous. At a minimum there must be phosphorous limitations in watersheds that are already impaired for phosphorous. (HEC) The definition of agronomic rate needs to be simply defined. (IPPA) Agronomic rate needs to be clarified. (MSMO) Is there a scientific basis for this? (TSH) Until there is a scientific based program that is efficient to use, economical, and timely to apply in practical situations, then I think our current manure management plans are adequate and are not damaging the waters of the state. (DTS) Our current manure management plans are very adequate and there is no proof that the waters of the state are being damaged. (SRF)

Response: The draft rules only address the agronomic rates for potentially available nitrogen. The owner/operator determines the agronomic rates to be used for land application of the manure.

Comment: The definition of ~~A~~bedrock~~@~~ at 327 IAC 16-2-2 should refer to common rock types such as carbonates (limestones and dolomites), sandstones, shales, etc. Has there been any consideration of porous sandstones as for carbonates: Sandstones can be good and very transmissive aquifers. (WR)

Response: IDEM has provided a less specific definition to allow for site-specific determinations about bedrock.

Comment: In 327 IAC 16-2-4, according to this, any person who has a dog that tramps down the grass is a confined feeding operation. (BBA) The 50% vegetation cover seems arbitrary as it assumes areas with 50% vegetation will have no runoff problems. Review either dropping the vegetative component, or raising it significantly leading to a true meadow environment. (WR) ~~A~~Confined feeding~~@~~ definition needs more specifics. (TSH) Does this include horses? The horse industry in Indiana is very large, have they been notified or had the opportunity to have input on these rules? (DTS)

Response: IDEM believes that 50% vegetation provide some filtering and help reduce run-off. The horse industry is addressed through the definition of ~~A~~other animal feeding operation~~@~~ in 327 IAC 16-2-29. IDEM has already started working on educating the industry on the draft rules.

Comment: In 327 IAC 16-2-5(3), does ~~A~~any animal feeding operation that causes a violation of water pollution laws~~@~~ mean a dog kennel on cement that is washed daily with a hose and water that is in 100 feet of a well, or 100 feet of a property line? Setback distance in Table 1. Or could it affect a person with 2 acres and 5 horses on a dry lot that would be 100 feet of a property or 100 feet of a well? (RML)

Response: The rules are not being written to address the above type of examples. The existing statutory prohibition on any person who allows discharge into waters of the state without a permit already provides statutory authority to deal with the above examples. Although, in practice, a little common sense and no enforcement would likely rectify any problems.

Comment: A definition of ~~A~~Certified Professional Geologist~~@~~ as found in IC 25-17.6-7 needs to be added. (WR)

Response: A reference to IC 25-17.6 has been included in 327 IAC 16-7-2(b)(5).

Comment: In the definition of ~~A~~confinement unit~~@~~ at 327 IAC 16-2-6, delete ~~A~~housed~~@~~ and insert ~~A~~maintained~~@~~ to reflect the statute. (NCE)

Response: The definition of ~~A~~confinement unit~~@~~ has been deleted.

Comment: Commentors that object to the phrase ~~A~~moves over land~~@~~. (RJB) (MSMO) (NG) (IPPA) (KGR) (DTS) (LH) (RIF) (SHDL) (JMC) (RES) (JLEM) (TSH) (CLF) (AML) (GCA) (BE) This definition needs clarification regarding contaminated run-off water. When can run-off water be cleared from any contamination? If so, how and when can that be achieved? (DDE) The definition of contaminated runoff should be defined technically instead of having broad definitions such as ~~A~~any field with manure applied at anytime~~@~~. This give way too much room for over-zealous inspectors to cause unnecessary problems for farmers. (KMV) This is very vague. There needs to be some qualifying value (MY) Would this imply that all rainfall that falls on a field where manure has been applied at some time in the past must be contained on the farm forever? (RY) (SRF) Would this include soil sediment with incorporated manure or any sediment discharged from a field? (SRF) The following ~~A~~rule~~@~~ needs to be clarified or revised: 327 IAC 16-2-8 Contaminated runoff; manure applied to soil? (BL) There needs to be a determination as to when run-off is no longer contaminated, other wise manure would never be able to be applied to the soil and/or water could never leave the farm to naturally recharge the environment. (IBCA) In 327 IAC 16-2-8, the definition of ~~A~~contaminated runoff~~@~~ should read that causes a violation by moving into open waters or public areas. Any manure that is rained on long and hard enough will move. Setback distances are to keep it away from unwanted surfaces. (SMC)

Response: The term ~~A~~moves over land~~@~~ has been deleted. The use of setbacks from property lines along with the encouragement to incorporate manure into fields are all attempts to minimize the chance for a violation and allow the operator a chance to stop runoff before a violation occurs. Inspectors do not see to cause unnecessary problems for any entity they inspect, rather they are to look for actual and potential problems that may cause environmental degradation. When such problems are identified, they can be more easily rectified prior to a violation occurring.

Any discharge into a water of the state must meet water quality standards at the point of entering a water of the state. If runoff meets the water quality standard for the particular pollutants contained in the run-off, it is no longer ~~A~~contaminated~~@~~.

Comment: In 327 IAC 16-2-11, for the definition of ~~A~~discharge~~@~~, the term ~~A~~other conveyances~~@~~ is too broad. (DE) (RIF) (JLEM) Discharge without limitation should have a quantity attached to be enforceable. A 5 gallon discharge will not cause harm in most situations. (SMC) (AP) In 327 IAC

16-2-11, the words "without limitation" is too broad a statement and could mean anything, it is not well defined. (LH) (AP) (RIF) (JLEM) (DTS) "Without limitation" should be stricken. "Other conveyances" can mean anything and is confusing. Keep the excessive detail out of the rule and put it into guidance. (IPPA) In 327 IAC 16-2-11, define "discharge". Will the tile lines under my fields be considered a "point source"? (WSF) (DTS) The wording "discharge" is too vague. "Other conveyance" can mean anything. (BLT1) (DTS) "Without limitation" and "other conveyances" needs to be more specific. (MSMO) (SRF) Does discharge include flow from tile lines, drainage ditch, grassed water ways, etc.? (RY) This definition is too broad, it looks like anything that IDEM wished to throw in was put into it. Do natural channels mean any drainage ditch, grassed waterway, etc? How does this definition relate to tiles. (SRF) The wording without limitation is too broad and could lead to unjustified harassment and lawsuits. The term "other conveyances" could mean anything. Does this include grass waterways and/or field tile? If so, it could make manure spreading nearly impossible for many. Remember, the soil is a very efficient filter of water before reaching the tile in most soils. (AML) (BE) The definition of "discharge" in 327 IAC 16-2-11 should also include: (3) Discharges into sinkholes, sinking streams, or other sub-surface karst conduits with known or unknown connection to surface waters or ground water. (IKC)

Response: Confined feeding is a zero discharge industry, thus any discharge of contaminants is considered a discharge. The inspectors are trained to investigate any potential spill. The inspectors are equipped with field ammonia nitrogen test kits, which are used to screen a potentially impacted water body. A discharge can normally be pinpointed by sampling up gradient from potential source and down gradient from a source. If the water quality changes, then that indicates the source is having a discharge. When field sampling is not conclusive or possible, IDEM has the ability to do additional testing and dye tracing to determine the source of a discharge. There are tests which can be done to differentiate human waste, animal waste, and chemical fertilizer, but these are not normally necessary when the discharge point can be tracked in the field to its source.

The point of the definition of "discharge" is that any pollutant entering a surface water of the state is considered a discharge. One could list all possible conveyances but how the pollutant gets to the water is not important. That fact that it is in the water is what is important and, without a permit, prohibited. If manure has saturated the ground to the point that the manure seeps into the drainage tiles and those tiles discharge into a stream or ditch, those tiles are considered a point source discharge. If what is discharged does not meet surface water quality standards, then a violation has occurred. If that violation can be traced back to a particular field or operation, appropriate enforcement action to abate the problem will be taken.

Comment: In 327 IAC 16-2-12, the following text should be added to the definition of "drainage inlet": "... any surficial opening or natural sinkhole/sinking stream that drains to water of the state" (IKC) The following "rule" needs to be clarified or revised: 327 IAC 16-2-12 drainage inlet? washcobs? (BL) The definition of "drainage inlet" should be reconsidered and perhaps defined as an opening that directly (not indirectly) discharges to the waters of the state. (IPPA) In this definition, the sentence should state "... drainage system that directly discharges into the waters of the state. (SRF)

Response: IDEM believes the definition is sufficient to provide protection to the environment. The guidance document may assist in providing further clarity.

Comment: Add a definition for **Aground water monitoring well** as follows:

Aground water monitoring well means a well that is approved by the commissioner for an industrial confined feeding operation and is constructed for the purpose of obtaining ground water samples for:

- (1) heavy metals that are used as growth supplements;
- (2) e-coli;
- (3) antibiotics injected in ingested by animals;
- (4) pathogens found in animal manure;
- (5) nutrients in animal manure;

at industrial confined feeding operations. (NCE)

Response: This term is not in the rule; therefore a definition is not needed.

Comment: Add a definition for **Aindustrial confined feeding operation** to read as follows:

(a) **Aindustrial confined feeding operation** means a confined feeding operation with one thousand (1,000) or more animal units.

(b) A unit of measurement for a confined feeding operation shall be calculated by adding the following animal numbers:

- (1) Brood cows and slaughter and feeder cattle multiplied by 1.0.
- (2) Milking dairy cows multiplied by 1.4.
- (3) Young dairy stock multiplied by 0.6.
- (4) Swine weighing 55 pounds or more multiplied by 0.4.
- (5) Swine weighing less than 55 pounds multiplied by 0.03.
- (6) Sheep multiplied by 0.4.
- (7) Fowl multiplied by 0.03.

(NCE)

Response: IDEM does not believe it is necessary to use this term or definition in the rule.

Comment: In the definition of ~~A~~new manure storage structure~~@~~ at 327 IAC 16-2-17(1), insert the word ~~A~~before~~@~~ after the phrase ~~A~~received by the commissione~~@~~. (NCE)

Response: Applications received before the effective date of the rule should be required to comply with standards applicable at the time of application.

Comment: In 327 IAC 16-2-20, the following provision should be added to the definition of ~~A~~karst terrain~~@~~. ~~A~~(6) Sub-surface conduits capable of rapidly transporting substantial amounts of groundwater~~@~~. (IKC) The karst definition at 327 IAC 16-2-20 needs help. Add a definition of karst as a dissolution process acting upon carbonate rocks. Then, recognize that there are many manifestations of karst dissolution and that they occur randomly in the field in either the surface or subsurface. The five features listed are only a partial list and ~~A~~large~~@~~ springs are not really any more significant than ~~A~~small~~@~~ springs. I suggest the following: ~~A~~Karst terrain~~@~~ means an area where karst processes have acted upon limestone, dolomites or other soluble rocks to produce characteristic surficial or subterranean karst features. These areas include those with carbonates rocks under terra rosa or other karst-related soils, or glacial deposits, and areas with carbonates rocks under veneers of other rocks. The karst features includes, but are not limited to: (1) sinkholes, (2) sinking streams and swallowholes, (3) caves or pits, (4) any spring, (5) blind valley, (6) grikes and enlarged joints~~@~~ (WR)

Response: Given the nature of karst terrain, IDEM prefers a broad definition of karst. Lists of features in the karst definition are intended as examples and not an exclusive nor exhaustive list.

Comment: In 327 IAC 16-2-23, the definition of ~~A~~manure management system~~@~~ has excessive and unnecessary detail. Feedlots and confinement buildings are not needed in the definition as they are already covered in subsections 1, 2, and 3. (IPPA) This includes everything. (RIF) Need more of a definition. (TSH) Why does this definition include confinement buildings and transfer systems? I also do not understand (D) ~~A~~another system approved by the commissione~~@~~. (DTS) While items (1) through (3) are appropriate under this article, (4) "feedlot" and (5) "confinement buildings" are not. The latter two are building/facilities and are covered under the first three items. More appropriate elements of a manure management system are contaminated run-off systems and manure utilization systems, both of which help address the performance standard for water quality. (IBCA) I am concerned with the inclusion of confinement buildings in the definition of manure management system, especially in regard to 327 IAC 16-6-8. Potentially we would have to list every bolt and nail used to construct a confinement building which is not only impractical, but is impossible. (JY) In 327 IAC 16-2-23(2), manure system includes buildings and transfer system, not just storage. (WVM) The following ~~A~~rule~~@~~ needs to be clarified or revised: 327 IAC 16-2-23(5) Manure management - building design not relevant, runoff is. (BL)

Response: ~~A~~Manure management system~~@~~ has been changed to ~~A~~waste management system~~@~~ defined in 327 IAC 16-2-45. The proposed rule contains this detailed description because it was to address all systems that producers may use to manage their manure. All the systems are to meet the same performance standards and all must have had approval prior to construction and operation. It is simpler to combine them all into one definition.

Comment: Manure application acreage is another treatment system that should be included in the definition of ~~A~~manure management system~~@~~ in 327 IAC 16-2-23. Without this approach, the overall

system seems incomplete - the application acreage appears to be a secondary consideration despite it having substantial potential for abuse. We recognize that fully addressing this concern could require a major re-write of the rule. Yet for CFOs proposed in karst areas, the suitability of the application acreage is no less important than physical construction for protecting water quality. (IKC)

Response: The application of CFO waste is required to be limited to agronomic rates to insure the uptake of nutrients without the materials being introduced into the aquifer in all places other than in direct conduit locations.

Comment: Add a definition for **Nutrient** to read as follows:

Nutrient means:

(1) nitrogen; and

(2) phosphorous.

(NCE)

Response: IDEM does not believe this definition is necessary and further clarification can be provided in guidance.

Comment: Change the definition of **Operating record** at 327 IAC 16-2-28 to read as follows:

Operating record means:

(1) the written record of the confined feeding operation activities kept by the owner or operator; or

(2) the written record of the industrial confined feeding operation kept by the department and provided to the public upon request.

(NCE)

Response: The **Operating record** is kept by the owner/operator and is not subject to public scrutiny. Any records or information kept at IDEM that is not confidential under 327 IAC 12 is available to the public.

Comment: In the definition of **Operator** at 327 IAC 16-2-29, add the following provisions:

(b) **Operator in responsible charge or control** means a person who:

(1) owns the animals fed and maintained at a confined feeding operation; or

(2) through contractual or extra-contractual means, prescribes the procedures or methods to be employed at a confined feeding operation.

(c) ~~A~~Operator in direct charge or control~~@~~ means a person who exercises managerial charge or control over the day-to-day operations of a confined feeding operation.

(NCE)

Response: IDEM has added language in the rule to provide further clarity on owner, operator and contractor and will provide further discussion in the guidance document.

Comment: Ponding needs to be defined as 1 cup or 1,000 gallons. (MSMO) There should be a time period associated with ~~A~~ponding~~@~~. (MY) ~~A~~Ponding~~@~~ should be defined. (RY) ~~A~~Ponding~~@~~ needs to be qualified, such as for over 24 hours. (SRF)

Response: Ponding has been qualified as over 24 hours in 327 IAC 16-3-1(e).

Comment: In 327 IAC 16-2-31, potentially available nitrogen and/or phosphorous levels should be considered for three growing seasons instead of just one crop year. Usage levels of these nutrients could be affected by weather patterns thereby reducing grain yields. (PDF) (CFI) The term potentially available nitrogen should be replaced by plant available nitrogen. Also the percent organic nitrogen here should refer specifically to ~~A~~organic nitrogen in manure~~@~~, not the general long-term breakdown of organic nitrogen in the soil. (SRF)

Response: IDEM believes potentially available nitrogen should be considered in terms of uptake on one crop year. ~~A~~Potentially available nitrogen~~@~~ is a better term. The percent organic nitrogen does not refer to the general long-term breakdown of organic nitrogen in soil. The term ~~A~~realistically~~@~~ has been added.

Comment: In 327 IAC 16-2-32, the definition of ~~A~~public water supply well~~@~~ should be clarified as those wells that are mapped and in active use. (IPPA) (RIF) (KGR) (DTS) (SRF) The public water supply wells and aquifers should be mapped. (MSMO) Public water supply wells should be required to be registered by the State of Indiana and such certification should be via a permitting process open to public review. In addition, public water supply wells should be required to maintain their equipment and structures to a minimum standard to help prevent accidental contamination of ground water sources. (KGR) 327 IAC 16-2-32 "Public Water Supply Well" is there maps showing the existence of well currently in production. Should be available to producers. (BE)

Response: Information about the location of public water supply wells can be obtained from IDEM's Drinking Water Branch in the Office of Water Management.

Comment: In 327 IAC 16-2-34, change ~~A~~used as a source of drinking water~~@~~ to ~~A~~of significance~~@~~. (NCE) The term aquifers of significance should be replaced with aquifers that are actual or potential sources of drinking water. (HEC) For the definition of ~~A~~sensitive area~~@~~, these areas as defined must be part of some current mapping mechanism available for livestock producers. With respect to other areas, these should not be left to the Commissioners discretion, they should be defined. (SHDL) (IPPA) (RIF) (DTS) (SRF) (AP) (TBA) (BE) (KGR) (MSMO) Before an area can be determined to be a sensitive area by IDEM or any state agency, a public hearing must be announced and held allowing for public comment. Also, in addition to confined feeding operations, all other potential pollution sources, such as

home septic systems and public sewage treatment systems, should be identified and be required to adhere to higher operating requirements deemed appropriate to help protect sensitive areas from further contamination. Sensitive areas should be designated only after an open public hearing and only upon submission of sound science-based information which overwhelmingly supports the designation of A sensitive area. Political and /or emotional testimony should be greatly discounted if not outright forbidden. (KGR) The draft rules should define A public water system. Any and all A public water systems should be registered and permitted by IDEM via public hearing with higher standards established and enforced in A sensitive areas. (KGR)

Response: The definition of A sensitive area is now at 327 IAC 16-2-35. IDEM believes that aquifers used as drinking water is descriptive of the type of aquifers that would qualify as A sensitive area in relation to this article. The provision concerning A other areas has been deleted.

Comment: The definition of A spill should include what amount of manure is considered to be a spill. (CMI) The word seepage defined in A spill no matter if it enters the waters of the state or not I do not approve. (ERE) What amount of seepage or leakage could result in a violation or fine? (CCPP) This is unrealistic. (TSH) (DTS)

Response: A spill is defined in 327 IAC 2-6.1 as it applies to confined feeding operations as A any unexpected, unintended, or unapproved dumping, leakage, drainage, seepage, discharge, or other loss of ... objectionable substances. The term does not include release to impermeable surfaces when the substance does not migrate off the surface or penetrate the surface and enter the soil.

Comment: In 327 IAC 16-2-38, delete the word A spraying, and add a new provision that reads A (b) Surface application of manure or waste liquid by spraying onto the land is prohibited. (NCE)

Response: IDEM is very concerned about poor spray irrigation practices and has included provisions in the rule to assure proper spray irrigation.

Comment: In 327 IAC 16-2-39, for the definition of A surface intake structure, these should be mapped and readily available to livestock producers through a public agency. (IPPA) (RIF) (MSMO) This definition should be qualified as directly providing water to a public water system, since technically any water that falls anywhere on the farm may ultimately end up in a public water system. (SRF)

Response: For clarification, the term has been changed to A public water supply surface intake structure. Maps of these structures are available from the Indiana Department of Natural Resources.

Comment: A Waste liquid and A excess drinking water needs a better explanation. We have some water tanks that have overflow drains on them. They drain into a tile and in the winter we keep them thawed with a constant small stream of water. It would be ridiculous if this were a violation. (GSD)

Response: As long as the liquid that is discharged into a tile does not result in a discharge of a pollutant into a water of the state, no violation has occurred.

Comment: We support the definition of A waters currently in the rule. We are not advocating regulation of every field drainage tile; however, we support a definition of waters of the state that includes tiled

streams. (NCE) The definition of ~~waters of the state~~ as is currently used in the proposed rule should be stricken. IDEM should revert to an earlier definition of ~~bodies of water~~ which defined what water bodies were regulated by this rule and exempted farm drainage tiles from being waters of the state. (IFB) (IBCA) In 327 IAC 16-2-43, the terminology ~~for~~ threatens to cause water pollution is unqualified and should be defined or stricken. (IPPA) In the definition of ~~waters~~ at 327 IAC 16-2-43, why are private ponds excluded, and what is a ~~private pond~~? Is this a small stock pond? (WR)

Response: The definition of ~~waters~~ is statutory. Since the definition of ~~waters~~ includes ground water, setback distances are to be measured from ~~surface waters~~, which will address the drainage tile issue. IC 13-30-2-1 provides that one is prohibited from discharging or threatening to discharge any pollutant that pollutes the environment. Further, IC 13-18-4 gives the commissioner the ability to take immediate action in any case where someone is causing, contributing to, or about to contribute to a polluted condition of the waters. A private pond is one wholly within private property and that has no hydrologic connection to waters of the state.

Comment: Will this rule mean we have to control rain water off the roofs of buildings? We also have underground springs in our fields, will we have to control them also? (DTS)

Response: Contaminated runoff must be prevented from entering waters of the state. Underground springs do not have to be controlled, but contaminated runoff must not enter a spring. Clean water should be diverted so it does not become contaminated and have to be handled as manure, decreasing storage capacity.

Comment: The draft rules have definitions that need additional clarification and terms like ~~impermeable barrier~~ defined. (DCPP) Terms like "impermeable barrier" should be defined." (DCPP1) (DCPP2)

Response: IDEM has deleted ~~impermeable~~ and instead just references a ~~barrier~~.

Comment: The term ~~other criteria~~ in the draft rules is broad and should be defined. (KGR) (SMC) In 327 IAC 16-7-3(c)(2), ~~other criteria~~ could mean odor or other things. IDEM's authority is water. This needs to be defined. (LH)

Response: ~~Other criteria~~ allows the commissioner to consider site specific information when making a decision. IDEM's authority is much broader than ~~water~~. However, the thrust of this rulemaking is water as it is a rule that will be adopted by the water pollution control board.

Comment: ~~Extra protection~~ is ambiguous and can create serious problems for each of us as well as your department, the courts, and our neighbors and friends. (GSN)

Response: The term ~~extra protection~~ has not been used in the draft rule.

Existing Operations

Comment: It would be financially impossible to increase the manure storage on an existing small livestock operation. Unfunded mandates are not acceptable in the agricultural business. (MLB) I don't think that existing confinement operations should have to conform to the new rules. (LD) (DTS) There

needs to be more consideration for the farms that have been in existence for years. (DLK)

Response: Design and construction requirements are not applicable to existing operations unless there is a release of manure to waters of the state. The operational practices that will apply to new and existing CFOs alike are designed to allow operations to use best management practices to maintain environmental quality and are also designed to provide enough flexibility to allow operations to be run in a way that is most efficient for the operation. It is not the intent of this rule to require a number of changes to existing operations that will result in expensive and time consuming retooling of the operations.

Comment: The current proposed rules will put us and other livestock producers at the mercy of our neighbors. Having to notify them every time we plan on expanding an already existing site seems unfair. If our operation was in production before an anti-agricultural family builds down the road from us, why should they have the authority to control our future? The current draft gives our neighbors the ability to dictate our existence. There needs to be a grandfather clause. (RF) I have no problem with rules, but it seems according to what I've read and heard that many proposed requirements may be imposed retroactively on existing permitted facilities. (DWB) If a current herd is AW-1 certified then those units should be left alone for the lifetime of the structure. (MSMO)

Response: The draft rule imposes no additional authority to neighbors. Performance standards will apply to existing operations.

Comment: I do not understand the need for a new approval just to make changes in an existing confined feeding operation. I would recommend a letter of notification of changes or expansion instead of a new approval. This also requires approval if we obtain additional acreage for manure application. (DTS) Why do we need a new approval to make changes in our operations, they already exist and obviously have not had problems or why would we be wanting to expand them? (SRF)

Response: A new approval is not required for all changes to an existing operation. Modifications and notifications for certain changes are addressed in 327 IAC 16-7-5.

Comment: 327 IAC 16-5-1(a)(1) "federal laws:" needs the language "under state delegated authority" to protect it from EPA superseding its reach. (IBCA)

Response: State rule language does not usurp any existing federal power EPA may have. In any situation wherein the state does not act under its delegated authority, EPA has the ability to come in and act to meet its responsibilities under federal law. IDEM does not believe this language is necessary in the rules.

Comment: The following rule needs to be clarified or revised: 327 IAC 16-5-1(c) Explain: if CFO plan is approved (BL)

Response: The meaning of this comment is not clear.

Comment: In 327 IAC 16-5, a Section 2 should be added as follows:

Sec. 2. (a) Operators in responsible charge or control of existing industrial confined feeding operations must install ground water monitoring devices within 180 days of approval of this regulation.

(b) Operators in responsible charge or control of existing industrial confined feeding operations shall comply with the following ground water monitoring regulations:

- (1) 329 IAC 10-21-2(a)(6);
- (2) 329 IAC 10-21-4(b) and (c);
- (3) 329 IAC 10-21-12; and,
- (4) 329 IAC 10-21-13.

(c) For each contaminant listed under 16-2-17, the ground water protection standard shall be:

- (1) the maximum contaminant level for that contaminant, if a maximum contaminant level has been established;
- (2) the secondary maximum contaminant level for that contaminant, if the secondary maximum contaminant level has been established; or (3) the background water quality established for that contaminant, based on background water monitoring data approved by the commissioner.

(NCE)

Response: IDEM understands the concerns relative to protection of our groundwater resources. The confined feeding rule is designed to require zero discharge and adherence with the design, construction and operational requirements will assure protection of the groundwater. Consequently, groundwater monitoring has not been mandated. IDEM retains the authority to require monitoring and other measures if needed to address a specific situation. It is noted that EPA's strategy on confined feeding operations also does not mandate groundwater monitoring or specific groundwater standards for these operations.

Approval Application

Comment: The rules should include language that specifically requires IDEM to issue a CFO permit, as a matter of right, unless specific, scientifically proven evidence of actual environmental damage is forwarded to IDEM in a timely manner. Other persons should not be afforded the opportunity to delay the issuance of a CFO permit based on unfounded, unscientific, perceived threats. (RFE)

Response: The issuance of a CFO approval will not be delayed based on unsubstantiated information nor on perceived threats.

Comment: Rule 6 has nothing to do with water quality. This rule should be site-specific outcome based and simple to follow. (BBA)

Response: The approval application rule (Rule 6) provides administrative requirements to obtain approval to construct a confined feeding operation. All applications are site specific. IDEM believes this is simple to follow.

Comment: The application requirements are too detailed. They require too much information that does not concern the CFO. (RIF) The application requirements are time consuming and an expense to us. (TSH) (DTS) Why does IDEM need more detail in the application package? (SRF)

Response: The information IDEM is requiring in the application package is necessary to evaluate the operation in order for IDEM to make an informed and defensible decision regarding the operation. The application is also consistent with the statutory requirements spelled out in IC 13-18-10-2.

Comment: In 327 IAC 16-6-1, add the following provision:

A(d) An industrial confined feeding operation requires a NPDES permit (NCE)

Response: IDEM does not believe that this language is required.

Comment: 327 IAC 16-6-1(a) It seems strange to have applicability buried in Rule 6. This should be incorporated into Rule 1. (HEC)

Response: The applicability sections provide information about who is affected by each rule. Not all rules in Article 16 apply to all confined feeding operations. However, IDEM has removed the unnecessary applicability sections.

Comment: In 327 IAC 16-6-1(c), the language is confusing. Adding additional application acres to one's approval should not trigger the need for a new approval and a subsequent public notification period. IDEM should clarify this language. (IPPA)

Response: IDEM concurs and has clarified this language.

Comment: In 327 IAC 16-6-1(c), add the following provision:

A(3) An increase in the number of animals which results in the confined feeding operation reaching or exceeding the 1,000 animal unit threshold (NCE)

Response: The rule applicability is not based on 1000 animal units and does not impose additional requirements on facilities that reach the EPA threshold for a CAFO.

Comment: In 327 IAC 16-6-2, the application requirements seem meager. I suggest a laundry list approach similar to that used in the landfill regs which is more comprehensive. This review should aid the applicant in determining if a site is suitable. How about a geology report? (WR)

Response: The details of the application requirements will be in the application packet. IDEM does not feel a separate geology report is needed.

Comment: In 327 IAC 16-6-2, the detail should be moved to guidance. IDEM may still take necessary steps to insure operational safety with the additional details in guidance. (IPPA)

Response: IDEM is working through the issues of how much information should be in the rules. It is the intent of the agency to provide enough information that a person who must comply with the rules knows what is required by reading the rules. To the extent that further explanation is needed guidance documents will be developed.

Comment: In 327 IAC 16-6-2(b), add the following provisions:

A(2) The name and address of the applicants, owner of the animals, and operators of the confined feeding operation.

(3) The number of animals to be fed and maintained at the confined feeding operation.

(4) The number of animal units to be fed and maintained at the confined feeding operation.

(5) The location of the confined feeding operation.

(6) The area and volume of any manure containment structure@

(NCE)

Response: This type of information will be included in the application form specified in 327 IAC 16-7-2(b)(1). It is not necessary that it be included in the rule language.

Comment: 327 IAC 16-6-2(b)(6); We question the science behind the need for test holes 5 feet below the base when 2 feet has been in the guidance document for years and has not caused any concerns. In addition, sensitive areas must go with deeper core readings rendering the 5 feet as unnecessary. (IPPA) How is the number of test holes determined? Five feet is probably not deep enough to get any water levels, let alone a reliable one, or get a handle on the soil and parent materials. Need 10-25 feet. (WR) Test holes that go only 5 feet below the base of the structure provide very limited information. For manure storage structures greater than .5 acres, a complete hydrogeologic site investigation should be required. This should enable the commissioner to determine the hydrogeology of the uppermost aquifer system, the geologic systems above that aquifer, the geologic strata defining the lower boundary of that aquifer, predict pollutant movement in the event of a release, and determine the adequacy of proposed monitoring system. Boreholes should extend toAat least 10 feet below the boundary of the uppermost aquifer or twenty feet into the confining unit, whichever is less@ (HEC) We are strongly recommending changing the depth at which soil borings occur from "at least five (5) feet..."to "at least three (3) feet..." At the three (3) feet depth, the procedure can be accomplished with a backhoe, while requirements to go deeper will demand use of additional equipment and expenses beyond that necessary "to adequately characterize the water table and soil." (IBCA) 327 IAC 16-6-2(b)(6) this is somewhat arbitrary. May be justified in some cases. (BE)

Response: IDEM staff need the information to make decisions on applications for an approval and to provide justification for the decision.

Comment: In 327 IAC 16-6-2(b)(6), delete the last sentence, and add the following to the end of the first sentence: ~~For~~ a professional engineer at the following frequencies unless otherwise stipulated by the commissioner:

(A) For concrete manure storage structures, sufficient test holes to adequately characterize the soil and topography changes, but not less than three (3) test holes per structure.

(B) For earthen manure storage structures, a minimum of three (3) test holes per acre or partial acre.

(NCE)

Response: IDEM intends to include further details on soil testing in the guidance document rather than in the rule.

Comment: In 327 IAC 16-6-2(b)(6), can IDEM legally allow the Federation folks to certify submittals? They are not authorized by Indiana statute. (WR)

Response: Yes, IDEM believes they are qualified to make a determination about test holes.

Comment: 327 IAC 16-6-2(b)(8); What is the purpose of identifying potentially affected parties? (SRF)

Response: The purpose is to provide potentially affected parties with notice that an application has been filed and an agency decision on the application will be forthcoming. Indiana's Administrative Orders and Procedures Act requires notice be given to parties who may be affected by an agency decision.

Comment: 327 IAC 16-6-2(b)(9); The call for certified persons and registered professional engineers should be in guidance, not the rules. (IPPA) I don't understand why we need a professional engineers service when S.C.S. has people trained in this area and we are paying them with our tax dollars. (EML1) What if the design is flawed? Who pays for the upgrade? Why are test holes required at a certain level? If the design is done by the professional, should not they decide if needed and if so, what depth? (BM) If we have a plan designed by a professional engineer, why do we then have to have the plan certified by a professional engineer? (DTS) (SRF) IAC 327 16-6-2 (9) This is a limiting factor based on the number of people with the knowledge and qualification to do such certification. Being a PE, I am not sure what I would be certifying, and question whether many PE's would be willing to certify a earthen manure storage structure without direct responsibility for construction observation/inspection. (BE)

Response: IDEM believes that earthen storage structures need the scrutiny of a professional engineer. IDEM has set a performance standard for design. The designer can choose how to meet that standard and submit it to IDEM for review and approval. The rule only requires a number of test holes that will characterize the site. The test holes need to be 5 feet below the base due to account for the seasonal variation of the water table.

The design of the structure must be certified by a professional engineer to ensure it will meet the performance standards. The professional engineer would be certifying that the design will meet the performance standard set out in the rule. By statute, the owner is accountable for the construction of the design.

Earthen storage structures can be constructed with a variety of materials and to ensure proper design standards are met, IDEM wants a professional engineer to sign off on the design. The NRCS can provide a certified design, but some producers may want the option to hire their own professional engineer.

Comment: In 327 IAC 16-6-2(b)(9), add CPGs as they can also design as seen in IC 25-17.6-7. (WR)

Responses: Under IC 25-17.6-7, Certified Professional Geologists can prepare a geologic report, however, there is no provision allowing them to design an engineering structure.

Comment: 327 IAC 16-6-2(c) should read "The commissioner shall deny...". Language should be added to ensure that the commissioner denies approval as needed to restore impaired waters or protect sensitive areas. (HEC) Language should be added to ensure that the commissioner denies approval as needed to protect the past, present, and probable future uses of the area, including the character of the uses of the surrounding areas. This is consistent with IDEM's authority under IC 13-14-8. (HEC) Language should be added to ensure that the commissioner denies approval as needed to protect the nature of the existing air quality or water quality. IC 13-14-8, Section 4(4). Language should be added to ensure that the commissioner denies approvals based on surrounding land uses or assessed impacts on property values of surrounding landowners. This is based on IC 13-14-8-4(7). (HEC) The following rule needs to be clarified or revised: 327 IAC 16-6-2(c)(2) Application requirements: threaten to pollute, whose judgement? (BL)

Response: Language allowing the commissioner to deny an approval is unnecessary in the rules as the authority to do so already exists. The statutes cited as justification speak to what boards must take into consideration when adopting rules, not what the commissioner must consider when making a decision.

A decision would be based on the individual case before the commissioner. As with any case wherein there is a threat to pollute, IDEM is charged with investigating that threat and abating the condition that causes the threat. Any decision made by the commissioner to deny an approval is appealable, at which point the commissioner's decision must be justified.

The commissioner can deny an application if it does not meet all the performance standards set in the rule.

Comment: Application materials should include an environmental assurance bond to be held by the agency to cover costs of cleanup in case of bankruptcy. The bond should be returned to the operator when monitoring at least 2 years after closure indicates no contamination has occurred. (HEC)

Response: IDEM does not believe that the statute provides this specific authority nor experience that such a requirement is necessary.

Comment: IDEM should not be able to change a producers approval without input from producers. (NSCH) (ANON6) (BF) (BS) (HST) (HSM) (HSP) (HSRT) (HSB) (HSI) (HSCY) (RTE) (EJN) (AGRI) (LTE) (LS) (KOF) (KR) (JP) (BJR) (SSF) (RBI) (JLH) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (NESS2) (WW) (RJMC) (DSL) (DBA) (WLB) (DGRE) (NN) (JJB2) (BLA) (KS) (BJRO2) (JGS) (WH) (TCZ) (SHDL) (GSD) (LLP1) (DKI)

Response: The rule sets out specific instances in 327 IAC 16-7-5 where an approval may be modified by the commissioner. These will usually be in response to a violation, so the producer will have input into how the violation may be corrected through the modification procedure.

Comment: An extensive past history of violations should be sufficient grounds for refusing approval even if the applicant or transferee is in compliance at the time of the application. Wording to this effect should be inserted in 327 IAC 16-6-2(c) and 327 IAC 16-6-4(2). (IKC)

Response: IDEM has no statutory authority to impose a good character requirements for applicants.

Comment: Commentors concerned that IDEM can change approvals without producer input or use of proper rule change procedures. (JER) (JLEM) (BE) (C&C) (LMG) (MSMO) (KGR) (NG) (APE) (JTE) The following rule needs to be clarified or revised: 327 IAC 16-6-3 Modification and revocations: this whole section needs clarification. (BL) In 327 IAC 16-6-3, IDEM may force their will on livestock operations based on their perception of existing problems that may cause. This is too broad of an authority base for IDEM. IDEM wants to be able to impose additional modifications on operational approvals without going through the public input and comment process of a rule change procedure prior to implementation.... even if they are fully in compliance with the zero discharge standard. This is an unacceptable use of authority by IDEM and must be changed. (IPPA) (RIF) What exactly is an existing problem? Can IDEM impose new requirements based on a perceived problem? (KSCH) In (2), what exactly does adequate information mean? (SRF)

Response: Modifications and revocations under 327 IAC 16-6-3 are needed because not all problems can be addressed in rule language. The section provides criteria to indicate the types of problems that would be addressed. Under the confined feeding control law and the proposed rules, IDEM may modify an approval for cause. This decision may be appealed under IC 4-21.5. IDEM has clarified the modification section. Rules cannot be changed except through the rulemaking process.

Comment: Commentors that do not want to notify IDEM when a change occurs in the size or age range of animals. (RCL) (BF) (HLS) (MW) (TWF) (LK) (KA) (BS) (SK) (DD) (CRE) (GF) (HW) (JJ) (PMC) (TCW) (KEL) (L&SP) (TRE) (EML2) (APA) (CMI) (CMI) (RMM) (MWC) (MR) (AJK) (DGF) (DHO) (HTSG) (RSCH) (DLOW) (JN) (PH) (RRE) (LTR) (KS) (KMB) (ABT2) (ELW) (JGS) (RCU) (BUF) (BMM) (JOY) (VS) (JLEM) (CCPP) (RY) (CVF1) (BM) (DTS) (SRF) (CLF) (CSH) (JMM) (RZ) (KBM) (TVJ) (GF) (NSCH) (ANON6) (RME) (HST) (HSM) (HSP) (HSRT) (HSB) (HSI) (HSCY) (PCG) (RTE) (MG) (EJN) (BAW) (HG) (AGRI) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (ICARD) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (GJ) (NESS2) (NESS1) (DBA) (WLB) (DCPP) (HMO) (MWL) (DFS) (CLE) (BGU) (CJ) (DTH) (DZ) (MRE) (BW) (NN) (GB) (JL) (BVF) (BLT1) (LMG) (RB) (SGP) (BH) (LA) (LT) (DDE) (CK) (DGR) (SMC) (DPS) (KAK) (JLA) (RBF)

(JK) (OK) (KKA) (RES) (DGRE) (IPPA) (MG) (KSCH) (MB) (KD) (BFA) (AML) (TMF) (WM) (BA) (LF) (RV) (GM) (JC) (RD) (DMO) (GM) We should not have to notify your office unless a significant change occurs, say 25% up or down on a yearly basis or the nature of the business changes (i.e., farrow to wean instead of farrow to finish). (DHF) As long as the total amount of manure produced would be unchanged, why would pig numbers and size changes have to be reported? (DR) The notification requirements are vague, do not enhance environmental protection, and are beyond the scope contemplated by the Indiana Legislature. (RFE) We agree with giving notice of change of age/size (i.e., farrowing to all finishing). (DHB) The part on making a new plan be filed when we change from farrowing to finishing is just plain dumb. (KWI)

Response: It is not necessary to provide IDEM with written notification of every change made, however, IDEM recognizes the concern about notification of changes in the age range or average size of the animals and has deleted the requirement. The application is approved based on what the producer proposed. IDEM has listed only a few occasions where the change is extensive enough for notification.

Comment: Our permits should be for total pounds instead of the number of head in each weight range. There is no need to have all the expense and time involved to make changes if the environment is not effected. (EML1)

Response: The concern is manure management. If there are changes at the farm that significantly affect manure storage capacity, then IDEM needs to be aware of the change.

Comment: Written notification of all the following is unneeded: repositioning structure; change age range or average size; close structure; and notice of completion. (RTJ) (FJ) Notification of new construction or modification of construction is both time consuming and unnecessary. (CLF) Why must they notify you when they begin modifying or constructing buildings? (CSH) (JMM) (RZ) (KBM) (TVJ) You say I have to notify your office and neighbors of any plans to change my operation in any way including manure application. (TRE)

Response: IDEM wants to know about the major changes in manure management including storage capacity. IDEM needs to update records based on changes made to the operation since the approval. The approval plans and application only refer to what IDEM originally approved. The decision is based on a submitted set of plans. If the plans change, the approval would not be congruent with the application.

Comment: If we stay within the boundaries as far as the amount of manure produced we should not have to resubmit for new permits with minor changes in our hog population. (JB)

Response: New approvals should be for adding additional capacity or other significant changes from the original application.

Comment: Who is paying for all of the extra paperwork sent to your office, not to mention the added personnel it will take to investigate each little call and pick through the required paperwork? (MSB)

Response: It is not anticipated that extra paperwork would be needed. There is no requirement to send large amounts of paperwork to the department.

Comment: In 327 IAC 16-6-3(b), the total amount and analysis of manure is important, not the number or size of animals. (C&C)

Response: IDEM believes it is easier to quantify animals than volume and characterization of manure.

Comment: In 327 IAC 16-6-3(b)(1-4), the notification should only be voluntary and not required. (KGR)

Response: IDEM believes notification to the department is valuable to maintain current information for IDEM technical and compliance staff.

Comment: What does the sentence "Other changes that will affect the ability of the operation to comply with conditions in the approval or in this rule" mean? (RY)

Response: This language has been modified in the draft rule. Specific changes will be discussed individually with the applicant on a case-by-case basis.

Comment: 327 IAC 16-6-3(b)(4) Should be rewritten to state: "Closure of any portion of a manure management system in which the owner or operator maintains at least the approved combined storage capacity at the confined feeding operation after the manure storage structure closure." (IBCA)

Response: This provision is now at 327 IAC 16-7-5(b)(3). IDEM has revised this language to indicate that if the remaining storage capacity after closure of a manure storage structure is less than one hundred eighty (180) days, then modification to the approval is necessary. If the remaining storage capacity is one hundred eighty (180) days or more, then notification to the department is required.

Comment: In 327 IAC 16-6-3(c), the commissioner should only be able to revoke an approval for material violations. A paperwork violation should not be cause for outright denial of an approval. (KGR) This does not say anything about the rights of the producer to appeal or petition for a hearing. (DTS)

Response: As with all violations, IDEM assesses the gravity and extent of harm done by the violation and attempts to work to remedy the situation; not all violations result in the revocation of an approval. Any final agency action, such as a decision to revoke an approval, can be appealed under IC 4-21.5. The rule at 327 IAC 16-1-2 states that all decisions are appealable.

Comment: In 327 IAC 16-6-3, add the following:

(d) The commissioner shall deny an application, including a modification to an approval, for the following:

- (1) The Farmstead Plan for industrial confined feeding operations indicates that a school, church, restaurant, park, or other public meeting places are within one mile of the nearest property line where the operator in responsible charge or control intends

to construct or expand an industrial confined feeding operation.

(2) The construction or expansion of an industrial confined feeding operation will result in devaluation of property values for residences or commercial establishments within one mile of the confined feeding operation, as measured from the nearest property line where the applicant or operator intends to construct the confined feeding operation.

(e) The commissioner shall revoke an approval application or deny a modification to an approval if the applicant or operator has a history of:

(1) three violations of water pollution control laws or regulations; or

(2) approval conditions that evidence an inability or unwillingness to comply with this article or conditions specified in the approval letter.

(3) the operator in responsible charge or control of an industrial confined feeding operation has been notified to rectify a violation of this article or conditions specified in the approval letter three times.

(NCE)

Response: IDEM does not feel it is necessary to differentiate an industrial confined feeding operation. IDEM does not have the capability of addressing property values. This should be handled through local zoning. IDEM currently has the ability to revoke an approval or deny a modification based on the violation.

Comment: As a lender, I strongly object to the provision that an approved permit may not transfer when property is sold. We need to know that buildings can be used for a long time and that they can generate cash flow to pay loans. (JDN)

Response: The transfer may occur when the land is sold as long as IDEM has been notified 45 days in advance. The transfer portion of the rule is a notification process only and used to update the approval records. It is necessary for IDEM to have information as to who is responsible for the operation of the approved CFO. If a building was a part of the original approval and is being maintained and operated in an environmentally protective manner there is no reason to believe that it cannot be used after the property transfer.

Comment: I agree that a transfer should occur to the new owner, however, the 45 days prior is not realistic. Many times operations are sold at auction with the sale being completed right away, there is no

way that the commissioner can be notified 45 days prior to the sale. (DTS) (SRF)

Response: Transfer of an approval does not require reissuance of an approval, just notification. Notification is required 45 days prior to transfer in order to update existing records and contact information. IDEM is evaluating the 45-day timeframe.

Comment: In 327 IAC 16-6-4, add A(b) The operator in responsible charge or control is liable for violations of this article@ (NCE)

Response: IDEM has made a number of changes to clarify responsibilities of the owner, operator and contractor.

Comment: 327 IAC 16-6-4; Substitute the word "owner" for the word "person" in the first line. (IBCA)

Response: The term Aowner@ has been changed to Aowner/operator@ to provide clarification.

Comment: A manure management plan should not have to be filed once every 5 years if it is never changed. Recertification every 5 years will be too much paperwork for you, let alone the producer. (SMC) The manure management plan is a good idea, but must be managed by producers and fertility specialists. (RROS1) I have no problem with submitting a manure management plan and emergency response plan. (TWF) (BWA) (AJK) (JOY) (GLM) I don't mind filling out an application or manure management plan. (RRE) 327 IAC 16-6-5 requiring a manure management plan is just more busy work for farmers who are already fed-up with government bureaucracy. (DDE) 327 IAC 16-6-5 This requirement serves no environmental value. It could be used as a trap by IDEM to catch producers out of compliance, as a five year update would be easy to forget. (JST) The minimum requirement for manure management plans are described in IC 13-18-10-2.3.

Response: The manure management plan is required by existing state law to be submitted every 5 years to maintain a valid approval under IC 13-18-10-2.3. Producers may add additional information for a complete nutrient management plan for their own use. IDEM believes the producers will benefit from keeping records on crop nutrients.

Comment: In 327 IAC 16-6-5, add: A(a) A manure management plan must be developed and submitted to the commissioner that identifies and describes practices to be employed to operate in an environmentally sound manner. At minimum, the manure management plan must contain:... (NCE)

Response: IDEM believes the best management practices in 327 IAC 16-9 encompass the operational standards necessary to protect the environment.

Comment: We recognize the need for operators to have flexibility in managing their operations, however, the manure management plan must have some degree of enforceability or it will have little value. (HEC)

Response: To the extent that requirements for the manure management plan are in the rules, it is enforceable.

Comment: 327 IAC 16-6-5(c-f) should be used as guidance and not rules. (KGR) (AP) 327 IAC 16-6-5(c-g) should be in guidance. (SRF) 327 IAC 16-6-5(c), (d), (e), (f), and (g) should be in guidance. (DTS)

Response: These provisions have been modified and are now at 327 IAC 16-7-11. The language needs to be enforceable and so will be retained in the draft rule.

Comment: Under the manure management plan in 327 IAC 16-6-5, IDEM has discretion to continually add more detail. This is not what was intended by the legislature. The additional detail being requested in the plan should be addressed in guidance, not rules. (IPPA) 327 IAC 16-6-5 would lead to over regulation. C, D, E, and F should be written as guides instead of rules. Why wouldnt the inspector bring a copy from the office if he is going to inspect a CFO? (RIF)

Response: IC 13-18-10-4 allows more detail to be added. IDEM believes the manure management plan requirements in 327 IAC 16-7-11 are the minimum needed to provide the information necessary to assure that the operation is run in an environmentally protective manner.

Comment: In 327 IAC 16-6-5, what is a legible map? Needs to be drafted, with scale and north arrow, etc. What features? (WR)

Response: Greater detail will be provided in guidance.

Comment: 327 IAC 16-6-5(b); Delete (1) in the (2) covers all issues related to the performance standard. (IBCA) (VFA)

Response: IDEM does not believe this change is necessary.

Comment: Section 5b gives IDEM the ability to micromanage our farms without any violations. (MSMO)

Response: The manure management plan does not authorize IDEM management of farms. It provides information to IDEM that demonstrates an environmentally protective plan has been developed for the farm.

Comment: In 327 IAC 16-6-5 (c), one may be able to assume that the terms ~~A~~soil fertility~~@~~ and ~~A~~nutrient recommendations~~@~~ include the standard nitrogen, phosphorous, and potassium, but without explicitly defining them as such we fear that this could be yet another area for great contention in interpretation due to its vagueness. (STV)

Response: The terms ~~A~~soil fertility~~@~~ and ~~A~~nutrient recommendation~~@~~ could cause confusion, therefore, these terms will be defined in the guidance document.

Comment: In 327 IAC 16-6-5(c), may need multiple soil test sites on bigger sites. (WR)

Response: Flexibility through specification in the manure management plan is provided in the rule to allow for multiple soil tests on large sites.

Comment: In 327 IAC 16-6-10(a), minimum acreage should be based on agronomic rates for nitrogen and phosphorous. Please specify a ceiling for phosphorous application. (HEC) Nitrogen is not even the important nutrient to be looking at. ~~Is~~ phosphorous. (DDF) What does the term ~~A~~adequate information~~@~~ mean for phosphorous impact to water quality? Are there specific research based standards that are going to be used to define when phosphorous limits or alternative management methods may constitute a threat to water quality from soil phosphorous levels? (RY) If IDEM is going to use phosphorous limit in the future, then the limits should be established now and shared with producers. (PDF) (CFI) The section of using phosphorus limits is of particular note. Switching to this limiting nutrient without further caveat is not appropriate nor would it be fair. (BE)

Response: IDEM recognizes nitrogen as being the element of greatest concern when it comes to determining the limiting factor for application rates. High nitrates in groundwater are known to cause health problems for infants and the elderly. Nitrogen is mobile in the soil and can leach into underlying aquifers if not utilized by crops.

Agronomic rates are considered to be rates of application based on the nutrient content of the manure, the fertility level of the soil, and the nutrient needs of the proposed or existing crop and which do not exceed the nitrogen demand of the crop. Phosphorous has been identified as having a potential maximum range within the soil before it also becomes mobile and lost via leaching. Extensive research is being conducted by academia and IDEM will be informed when a consensus of recommendations relative to phosphorous limits are formulated. The draft rule provides a mechanism to recognize phosphorous as a limiting factor in the future if necessary. Additional information about phosphorous soil parameters will be addressed in guidance.

Comment: The following ~~A~~rule~~@~~needs to be clarified or revised: 327 IAC 16-6-5(d) Manure management: need for \$50 test for plant - lab test instead of \$.80 N. meter? (BL)

Response: The draft rule does not specify a particular test to use. Recommendations on tests will be provided in guidance.

Comment: Based on the knowledge about application of phosphorous at rates that do not burn down crops or cause water pollution, and the ability to measure phosphorous in the soil, IDEM should require phosphorous application rates be adhered to in manure management plans. A number can be set based on the individual characteristics of application areas until EPA completes its research. (NCE) In 327 IAC 16-6-5(d), phosphorous is omitted here and probably should be included. A possible solution to prevent phosphorous from being overloaded on the soil and entering surface waters is to test both soil and manure for both nitrogen and phosphorous every year. We would also recommend that the soil be tested for other contaminants that may harm the environment and/or public health, such as heavy metals: copper, and biological contaminants. (STV) In 327 IAC 16-6-5, delete the current (c) and add ~~A~~(c) The soil test parameters must include phosphoru~~@~~ (NCE) Both soil and manure test parameters should specify available phosphorous. In guidance, IDEM can specify which tests of available phosphorous will be accepted. Give the producer a choice of tests. (HEC)

Response: NRCS will be providing phosphorous information in the comprehensive nutrient management plan. IDEM~~s~~ rules allow for the addition of a phosphorous limit. IDEM does not believe there is any reason to test for other contaminants because they are unlikely to be part of the feeding of

the animals.

Comment: In 327 IAC 16-6-5(d) add: A(4) at industrial confined feeding operations, bio-monitoring to test for emergence of antibiotic pathogens@ (NCE)

Response: IDEM does not feel it is necessary to differentiate industrial confined feeding operation@.

Comment: 327 IAC 16-6-5(d) These manure tests, which are expensive, should be required once every 5 years. In between submissions of the manure management plan, other technologies are operationally sufficient, such as the N-meter. (IBCA) (VFA) In 327 IAC 16-6-5(e)(2), is 3 years too great a period with heavy use? (WR) While it may be appropriate for confined feeding operations to prepare manure management plans, they should not be difficult to prepare. There is a difference between operational tests for manure and lab tests. A lab-tested manure analysis and soil analysis should be required every 5 year in conjunction with the manure management plan. (RDK) It is sufficient to conduct manure tests every 4 years instead of 3 years. (RHW) 327 IAC 16-6-5(e) Frequency of soil testing and manure testing should be changed to once every 5 years to coincide with the manure management plan updates. (IBCA) (VFA)

Response: IDEM believes 3 years is a good time frame since it is based on agronomic rates. In 327 IAC 16-6-5(e) the frequency of manure testing can be specified in a manure management plan with justification if the frequency is greater than 3 years.

IDEM believes that good nutrient management is the cornerstone of utilizing manure properly. We understand that soil fertility is normally monitored and therefore adding the knowledge of manure nutrient content completes having the critical information to make accurate application rate decisions. IDEM is writing guidance documents that will provide information on what laboratories perform the tests. The Cooperative Extension Service also has several publications that provide excellent information on manure and soil testing. Manure should be adequately tested to characterize the different types of manure generated on a farm. IDEM recognizes the N-meter as an affordable mechanism to determine the nitrogen content of manure and will try to reflect this in the next draft of the rule.

Comment: 327 IAC 16-6-5(f) Should be changed. Instead of "One (1) test must be conducted for each type of manure generated," it should read "One (1) test must be conducted for each species of manure generated." (IBCA) (VFA) In 327 IAC 16-6-5(f), please clarify what is meant by a type of manure@. Does this mean liquid versus solid, or broilers versus layers, or what? (HEC) Why is it necessary to conduct tests on each type@ of manure generated? (DB) One test for each type of manure. My farrowing and nursery pits drain into my gestation pits for longer storage time. (WVM)

Response: IDEM intends to provide more detail in guidance. Testing should be based on the species and age types, or manure combined in one pit. Clarification will be provided in guidance.

One of the basic components necessary to determine proper application rates is the knowledge of how much nutrient is contained in manure and then combining that with site specific fertilizer recommendations for a specific crop. Without the information the manure nutrient content can only be approximated and due to the varied type of storage facilities, age of manure, etc., the agency believes that a producer will be better prepared to determine accurate application rates to minimize potential of

applying excess nitrogen if testing is done.

Comment: In 327 IAC 16-6-5(g), the representative should have to give a minimum of 48 hours notice prior to an inspection along with a limited window when the inspection will occur. (KGR)

Response: There is no statutory requirement that inspectors give 48 hours notice prior to an inspection and no such notice is given to any other entity inspected by IDEM.

Comment: A copy of the current manure management plan must be reasonably accessible; does this mean we need to have the paper work up to date daily and in hand immediately? (DTS)

Response: The manure management plan need only reflect the procedures for testing and provide maps of manure application areas. Daily records are not necessary unless there would be a water quality violation.

Comment: With pit or lagoon waste application, one should take nutrient density test to determine application rate. The most efficient and best testing method for nitrogen based application is use of a Nitrogen meter. (BM) Manure from stock and cow-calf operations vary greatly from day to day - testing would not be a very good indication of the content. (JDS)

Response: IDEM recognizes that the most information about manure used as a nutrient is obtained just prior to application. The N-meter would provide that information.

Comment: If water quality is the issue in these rules, then wouldn't testing the soil for nutrients be more practical than testing the manure itself? (KMV)

Response: The manure test along with a soil test provides for nutrient information necessary to make crop fertility judgement.

Comment: I think the section on manure testing needs to be changed. One test per pit seems to be enough. (DLO)

Response: The A type of manure means manure from different manure storage structures.

Comment: I feel having to soil test after every manure application is quite costly and would involve a lot of paperwork on both sides. (TG)

Response: There is no requirement to conduct a soil test after every manure application. The requirement is for testing every three years.

Comment: I feel it is unnecessary to test manure from a pit as the nutrient content will vary throughout the pit. The best way to determine the area of application would be by the pounds of pork per acre. It should be applied in two applications at least a month apart. (JES)

Response: When the pit is agitated just prior to application, it will give a more accurate picture of nutrient content. Application times vary on the time of year, crop and soil fertility.

Comment: Don't have rules that require expensive tests on soil, manure or water in developing a manure management plan. (CLR) (AML) (DDD) I do not object to soil and manure testing as long as it can be done on the farm in a convenient, cost effective and timely manner. (GCA)

Response: IDEM concurs. IDEM believes producers need to obtain and use basic information in order to use the manure as a nutrient. IDEM continues to discuss ways to make the rules as cost effective as possible for those who must comply with the rules. Manure and soil tests can be done through independent laboratories or through local fertilizer or soil and water districts.

Comment: Plot maps and farmstead plans must only contain information that is well mapped by USDA and/or USGS, readily available to the applicant and known at the time of application. This includes public water supply wells, water wells, drainage patterns, tile lines and drainage inlets. (IPPA) Public water supply wells should be in use and mapped by IDEM so we will know which areas to avoid and other problem areas, not just at the commissioner's discretion. (EML1) In 327 IAC 16-6-6(a)(2), public water supply wells should be identified, permitted, and approved by IDEM and should be in active use. (KGR)

Response: Public water supply wells and water wells are mapped by IDNR. For drainage patterns, tile lines and drainage inlets, the farmer has better information. It is only necessary to know where these structures occur within 500 feet of the waste management system. IDEM does not believe this is unreasonable.

Comment: Section 6-2 should read active public water supply wells. (MSMO)

Response: Any public water supply well that is, or may, be used for drinking water should be protected.

Comment: We do not and can not spend time searching for things off our property, such as old or abandoned wells or drainage openings on other properties. These should be registered by others and a matter of public record if the public is supposed to be aware of them. (WH) (TCZ) In 327 IAC 16-6-7(a)(4), this should only refer to known water well locations. (KGR) (MSMO) In the farmstead plan section, water well locations should be changed to known existing water well locations. (CWS)

Response: IDEM believes it is reasonable for the farmer to identify wells within 500 feet of any waste management system. The producer needs to be aware of well locations near the storage structures and features that may be affected when applying manure. IDEM is not requiring extensive searches or investigations to find these features.

Comment: The areas that are excluded due to site restrictions in 327 IAC 16-10-2 and the setbacks in 327 IAC 16-10-3 should be delineated on plot maps submitted under 327 IAC 16-6-6(b)(3). The following change should be made to that section: (3) The boundaries of all manure application areas, with excluded areas clearly delineated. This will help IDEM determine, prior to approval of an application, the sensitivity of the manure application acreage if a substantial number of excluded areas (e.g., sinkholes) are present within the boundaries of the plot. (IKC)

Response: The scale of the plot maps makes it impractical to try to accurately reflect these areas on a

map.

Comment: Add NRCS soils map, detailed site topo map as needed, USGS topo blown up to usable size, regional geologic maps, detailed site geology by CPG as needed, USFWS wetland maps, 100-year flood maps, etc. (WR)

Response: IDEM believes the existing map requirements are adequate to address the concerns.

Comment: In 327 IAC 16-6-6, change plot to site. Add USFWS wetlands, IDNR flood, and regional geology and soil maps. (WR) Plot maps need to include roads, soil types, topographic features and tile lines. (HEC)

Response: IDEM believes the current map requirements are adequate.

Comment: A need for a site karst field survey exists to make sure no features are missed. This could be as simple as a walking tour and map. This work and any other field work should be done by the applicant or their private CPG consultant, and not IDEM staff who have a conflict. (WR)

Response: IDEM does believes this is necessary, only for areas where manure is to be stored, and discharge features with surface expression.

Comment: In 327 IAC 16-6-6 add: A(c) The maps in (b) must be legible and clearly show the location of the animal confinement structures, and boundaries of the property where the confined feeding operation and all manure application sites are located. (NCE)

Response: This requirement is already in the section on farmstead plans (327 IAC 16-7-9) and manure management plans (327 IAC 16-7-11).

Comment: In 327 IAC 16-6-7, please specify that the farmstead plan should include all areas where manure will be spread. We do not support the use of the word Aknown@for drainage tiles. It is the operators responsibility to find out. Inserting the word Aknown@provides a legal loophole. (HEC)

Response: Manure application areas are included in the plot map in 327 IAC 16-6-6. Drainage tiles that are not already identified cannot be found without digging. If the tile is found during construction, it must be severed and plugged.

Comment: We question the use of 500 feet in 327 IAC 16-6-7. (IPPA) What is the reason for changing the structure site requirements from 300 feet to 500 feet? 300 feet is satisfactory. (RJ) In 327 IAC 16-6-7, as the distance increases we will have less and less acres to spread manure on. (RIF) In 327 IAC 16-6-7, many farmsteads have changed ownership, disappeared, or moved on the farm. Anything not in plain sight should be listed as known and not existing. (C&C) The farmstead plan should include all features within 1 mile. The list of features to be recorded on the farmstead plan should include schools, places of worship, and public meeting places. (HEC)

Response: This section is now at 327 IAC 16-7-9. The 500 foot distance is only for identification of certain features near the proposed waste management system. This is not a setback. IDEM believes 500

feet is sufficient to identify features of concern that may be impacted by a waste management system.

Comment: 327 IAC 16-6-7 Farmstead plan. Sec.7(a)(2) "Waters of the state," should be replaced with "Bodies of water." (IBCA)

Response: The rule has been changed to read "surface waters of the state" in relation to setback distances.

Comment: The farmstead plan should include all karst features within the stated distance from the manure management system. The following should be added to 327 IAC 16-6-7(a)(10) All physiographic karst features (IKC)

Response: IDEM believes the karst features listed in the definition at 327 IAC 16-2-21 provide sufficient information.

Comment: If it is the intent that karst features should instead be addressed under the diversion of uncontaminated surface water under 327 IAC 16-6-7(b), this needs to be reworded so it clearly includes karst drainage routes. (IKC)

Response: This provision is now at 327 IAC 16-7-9(b). Karst features are not addressed under (b). This provision includes any diversion or drainage route that demonstrates that uncontaminated surface water will not enter a storage structure.

Comment: We suggest the farmstead plan as a starting point for circumstances that justify denial of a permit. We also suggest using animal units for the following proposal. The rule should have distinct requirements for small farms versus factory operations. The current language would apply to facilities under 1,000 animal units. New language should be added to address larger operations. In relation to IC 13-14 which mandates each environmental board take into account issues beyond the immediate statutory scope of the board in question, for the character of the uses of the surrounding area, 500 feet is inadequate for large operations. The farmstead plan should be expanded to include schools, churches parks, municipalities, or businesses, as well as to all the items currently listed in the proposed rule, within one mile of a proposed facility with 1,000 animal units or greater. The rule should mandate a survey of property values within one mile zone that measures the potential impact of the proposed operation on those property values. If a facility of 1,000 or more animal units is proposed within 2 mile of any public meeting place, the approval should be denied. If property values are projected to fall within 1 mile of the facility, the permit should also be denied. We also propose a formal study, based on the Heber model, of the impact on these properties of prevailing winds in areas in which wind comes from a single direction at least 50% of the time. In the instance where negative impacts on property values are estimated to occur beyond one mile, a two mile standard should be invoked. Any reduction in property values or significant impacts on public meeting places should lead to the denial of a permit. (NCE)

Response: The farmstead plan is a portion of the application and is necessary in making a determination on the application. The rule has been changed to use animal numbers rather than animal units, however the limits are comparable. 327 IAC 16-4-3 addresses additional requirements for large operations. IDEM can only take into account environmental matters when reviewing applications. Property values

are a local concern.

Comment: Commentors concerned about listing all construction materials. (IPPA) (DTS) (APA) (PH) (SHDL) (RIF) (BJRO1) (MSMO) (NG) (NN) (BA) (KC) (JC) (GSFP) (JTE) (SGP) (WW) (RJMC) (DSL) (EML1)

Response: IDEM does not intend for applicants to identify all materials this specifically. Additional information will be provided in guidance.

Comment: 327 IAC 16-6-8 This requirement will necessitate completion of construction plans prior to granting of IDEM permits. While this may be acceptable, it is a fundamental change in the way that IDEM has operated and will place an additional burden on the producer in the way of "up front" costs. The plans and specifications will need to be complete before submittals are final and approvals can be granted. (BE)

Response: Plans and specifications are required for an approval application under IC 13-18-10-2. Because IDEM's approvals are approvals for construction, IDEM cannot provide approvals without the construction plans and specifications, nor can an approval be granted based on speculative or incomplete plans.

Comment: Commentors expressing concern about neighbors having control of the approval process. (RCL) (RHN) (PH) (RCL) (JLB) (CK) (HMO) (MWC) (JJB2) (NK) (MK) (KSCH) (BJRO1) (ELW) (AH) (BH) (MWG) (CRE) (DB) (MS) (WLH) (KEL) (CAD) (RBF) (RMK) (LB) (KAK) (KLK) (EML1) (BLT1) (TBA) (WH) (TCZ) (AO) (MGS) (RCU) (RRSO4) (DHB) (SMC) (M&E)

Response: IDEM has control of the approval process. Any decision of the department is appealable under IC 4-21.5.

Comment: Commentors that feel notification of neighbors would be burdensome or invite problems. (LLP) (APA) (NSCH) (ANON6) (BF) (RME) (DTH) (BVF) (RTE) (EJN) (AGRI) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (WW) (RJMC) (DSL) (WHA) (PMC) (LTR) (KS) (BJRO2) (JGS) (GLM) (GSD) (BGU) (CWS) (RRSO1) (CVF1) (FC) (MB)

Response: IDEM believes that some of the appeals brought against expansions would be reduced if communication between parties was more open and began early in the process. Currently, neighbors frequently find out after the approval is issued and they feel there is no other chance to understand the proposal and express their concerns. The public notification requirements apply only to those adjacent landowners of the confined feeding operation property, not the fields receiving the manure.

Comment: Commentors that feel notice requirements exceed statutory authority. (IPPP) (JK) (KBB) (MSMO) (IFB) (ICARD) (APA) (ICARD) (MSB) (SCA) (SCM) (CKD) IDEM, despite the Greenfield provision in the CFO statement, continues to maintain CFO approvals should be open to public notification. (BJ) IDEM should not have the authority to require public notice. This should be left up to the county zoning commission. (RRE) IDEM should use the legislative language on public notice (BJRO) (SG) (RDR) (IPPA) (IBCA) Adding buildings falls under local zoning jurisdiction. (CLF)

(RC) (ICARD)

Response: The rule has been revised to match the requirements in the statute.

Comment: Notification of neighbors is not an appropriate change. (HLS) (MW) (JDN) (CSH) (JMM) (RZ) (KBM) (TVJ) (GSC) (MRE) (CMI) (CLE) (DSCHN) There is no need to notify adjoining landowners when I add buildings or do remodeling or enlarging at my present location. (RB) (BRS) (CLF) (PCG) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (LK) (KA) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (RJG) (JO) (DBA) (AM) (CWS) (NN) (MG) (LT) (BAW) (GJ) (NESS2) (DGR) (ICARD) (RHN) (SRF1) (BLA) (LMG) (BFA) (JOY) (NG) (TV) (LLP1) You are asking that all adjoining landowner be notified when I add a building. I am not for this. (SR) (WM) (LF) (DCPP1) (JC) (JKU) (TI) (DCPP2) What is the purpose of notifying adjoining landowners of a plan to build? (BS) (SGP) (HST) (HSM) (HSP) (HSRT) (HSB) (HSI) (HSCY) (DHF) (DCPP) Why do I have to notify adjoining landowners and the county commissioners if I want to expand? (DTS) (SRF) Why should our neighbors and commissioners know every time we decide to make improvements? (CVF) No one is going to notify neighbors of changes in their operations. (RROS1) Adjoining landowners should not have to be notified if I add a building. (RHO) The need to notify our neighbors every time we desire to improve our operation is unfair. (DLOW) (JN) (VS) Why should we have to inform our neighbors what we are doing with our buildings? This falls under local zoning controls. (BUF) We should need to get consent of our neighbors. (DJN) (SKH) (LNI) (DL) (MEN) Notification of adjoining land owners when adding buildings should not be the responsibility of pork producers. Let local zoning take care of this at the local level. (DD) I am concerned about public notification approval being contingent on local approval. (RTJ) We feel if an operation is permitted to build or expand, the public has already been notified about our intentions through public hearings, zoning board meetings, etc. (CCPP) Your requirements for notification of neighbors is unreasonable. Why are the notification requirements not consistent for all landowners? (JPM)

Response: IC 13-18-10-2 requires notification to adjoining landowners after submitting an application for an approval. IDEM continues to attempt to balance the concerns of operators with landowners surrounding the CFO sites and other parties that may be affected by the CFO. The rules do not supercede or preempt any local zoning requirements.

Comment: Public notice should only be needed on undeveloped land. (SRF1) (KGR) Existing operations and operations which already have a valid confined feeding permit should not be required to post public notice but should be encouraged to voluntarily give notice to concerned parties. (KGR)

Response: IDEM has changed the language in 327 IAC 16-7-12 to reflect the statutory language.

Comment: Why do we have to have a list of potentially affected parties? What happens if someone complains that they were not notified and yet we did not think they would be affected? (DTS)

Response: IDEM believes it is important to include people that could be affected in the process as early as possible. If a person feels they were not notified, they can appeal under IC 4-21.5. IDEM can ask the applicant to assist in the identification of these persons (IC 4-21.5-3-5(f)).

Comment: Neighbors should need to put up money to cover our costs if there is no justification for their complaint. (HF)

Response: IDEM does not have authority to require money or bond by a person making a complaint.

Comment: IDEM needs to protect us from frivolous, ungrounded claims from the influx of city dwellers moving to the country. (LLP)

Response: IDEM believes that much of the tension would be alleviated if land owners, who also have a right to enjoyment and use of their land, were provided notice and given a chance to communicate any concerns prior to issuance of an approval. IDEM does not issue notices of violation based on frivolous or ungrounded claims, nor would an approval be denied based on such claims.

Comment: If the public notification requirement is for the purpose of alerting people to the possibility of an operation which may affect water quality in their area, I have to ask, isn't assuring water quality part of the job of IDEM? If IDEM determines that there is no problem, based on sane, logical reasons supported by evidence or science, then there should be no problem. If a citizen thinks there is, then they can go get a lawyer. (PV)

Response: The purpose of this draft regulation is to help assure protection of water quality in Indiana. Any decision of the department is appealable by any affected person under IC 4-21.5.

Comment: A good relationship exists with my neighbors because of efforts to do a good job. However, there are those who would love to make us the cause of all water problems. IDEM has a job to do to protect our interests and stop this nonsense. (TB)

Response: IDEM's job is to protect the state's environment, not the interests of one group over another. All citizens of the state have a right to enjoy the natural resources of the state. If anyone causes water quality violations, it is IDEM's job to identify and abate the problem. IDEM does not act on unfounded allegations.

Comment: In 327 IAC 16-6-9(a)(B), we have no argument with notifying adjoining landowners, however, notifying all occupants of the land exceeds the bounds of public notice. Are we required to notify tenants that rent that property? The actual landowners should be the only person notified, and we believe this should be on a voluntary basis, but encouraged as good business practice. (DPS)

Response: The rule would require notice to tenants who rent property and actually occupy the land.

Comment: 327 IAC 16-6-10 contains references to human health and the environment which should be stricken since they are covered under other statutory references in agency rules. (IPPA)

Response: This section is now at 327 IAC 16-10-1. IDEM will retain this language since it accurately reflects the mission of the department.

Comment: I don't like the public notice requirements that are required in an area that is designated for agricultural use, but it seems to be a necessary evil. All it usually does is stir up emotions and rumors. I

do not believe that notice is necessary if I want to change the size of or type of animal that is in my barns. The barns have already been approved and if the manure management does not change the public will not be effected. If I want to add buildings I will notify the adjacent landowners, this will affect the manure management of my farm. (WSJ) (RD) (JTK)

Response: Certain changes only require notification to the agency. Any modification that requires an agency action must have public notice of the decision provided by the agency.

Comment: 329 IAC 16-6-9 I believe that IDEM has no authority to require producers to notify neighbors before construction. This may be a good thing to do on a voluntary basis for good public relations reasons. However, IDEM's job is to insure good water quality and this has nothing to do with that. (AML) (APE) Notifying neighbors should be your job. (WJ) (ADP) (GF)

Response: This section is now at 327 IAC 16-7-12. The language has been changed to reflect the statutory requirements in IC 13-18-10-2(b), requiring notice by the applicant for construction of a confined feeding operation on undeveloped land.

Comment: Does IDEM have legislative authority to implement the changes in public notification requirements that are in this rule? I feel very threatened by the prospect of new neighbors, who have no understanding of modern production practices, being notified of changes to our operation that are very minor. (JDH) (WOF) (MAB)

Response: IDEM does have authority to implement public notice requirements. Minor changes to operations do not require public notice.

Comment: You want to require paperwork and notifications to yourself or the neighbors when we change age range or average size of animals, spread manure on fields or even when we upgrade or add buildings at our present location. Why must we notify them every time we turn around to improve our facility or carry out chores that are an obvious part of our business? (JT) (WM) (SM) (RV) (KC) (WB) (WJ) (DCPP1) (MLS) (DLK) (JKU) (GCA) (GCA) (GSFP) (TI) (ADP) (JTK) (MAB) (DWD) (MLE) (GSN) (JLSM) (JDE) (DCPP2) (JTE)

Response: The notification requirements for changes in age range has been deleted. Spreading manure on fields only requires recordkeeping that will normally be kept at the operation. Major upgrades or the addition of new buildings requires an approval modification or a new approval.

Comment: Modification of existing facilities that do not increase manure storage or decrease current detention times do not need public approval. (SL) (GM)

Response: Public approval is not required for modifications.

Comment: Notification requirements are vague, do not enhance environmental protection, and are beyond the scope contemplated by the Indiana Legislature. The phrase "potentially affected person" is not defined. The notification language should be eliminated. (LN)

Response: IDEM is required to provide notice of a decision or order to each person who has a

substantial and direct proprietary interest in the subject of the decision, or to each person who claims an interest in the subject of the order.

Comment: IDEM should post all applications on its web site in their entirety. This, however, is not adequate public involvement. The public should have access to records of operation and releases at confined feeding operations. (HEC) We propose that language be added to the proposed rule under the notice section that requires IDEM to acknowledge the receipt of a permit application on IDEM web site within 24 hours of its being submitted to the agency. The following information should be posted: name of applicant; name of contract corporation, if applicable; number of sows; size of lagoon or pit, if applicable, in acres and gallons; location; contact person for the agency and the facility. (NCE)

Response: IDEM continues to work to enhance access to public information including through electronic media. Information required to be submitted to the agency that is not confidential is available to the public.

Comment: All existing and new operations of 1,000 animal units or more should monitor ground water for nitrates and chlorides, e-coli, heavy metals found in growth supplements, antibiotics, and pathogens found in hog waste. E-coli standards could be based on Clean Water Act standards. Heavy metal standards could be based on standards for heavy metals in sludge. Any indication of pathogens should be cause for corrective action. (NCE)

Response: At this time, IDEM is not requiring ground water monitoring; however, if a problem exists, the rule includes authority to require it as part of a remedy.

Comment: Large operations should conduct bio-monitoring of wastes to test for emergencies of antibiotic resistant pathogens. (NCE)

Response: Manure testing is required in 327 IAC 16-7-11. Testing for pathogens is not required, but is recommended.

Comment: Provision should be made for investigation of public complaints. We propose that if 10 or more residents or business owners sign a petition of complaint about a facility of 1,000 animal units or more, that IDEM be mandated to hold a hearing in the area to investigate the claims. Furthermore, any violations must be immediately corrected upon discovery. Moreover, three complaint petitions with substantiated claims should lead to the revocation of a permit. The petition could be signed only by residents or business owners who resided in the area (one mile from the facility) prior to the siting of the facility. If there are less than ten residents or businesses within a one mile radius of the facility, a majority of the residents would prompt a hearing. (NCE)

Response: If sufficient interest is generated in an application, IDEM can conduct a public hearing. IDEM inspectors respond to all complaints.

Comment: In 327 IAC 16-6-9, you are trying to exceed the authority granted by the legislature.

Response: IDEM believes it is acting within its authority in the development of the draft rule.

Comment: 327 IAC 16-6-9 Farmstead Plan. Sec. 9. Insert a phrase so that the opening statement reads, "An applicant who applies for an approval for a new or unapproved confined feeding operation..." (IBCA)

Response: IDEM does not understand this comment. 327 IAC 16-6-9 did not refer to the farmstead plan.

Comment: In 327 IAC 16-6-9, an absentee landowner would not be notified. Change Aor@ to Aand@ to include tenant and absentee landowner. (WR)

Response: This language has been changed to reflect the statutory language at IC 13-18-10-2(b).

Comment: In 327 IAC 16-6-9, it is unclear on the ability of the applicant to ascertain the presence of karst features within 500 feet of the construction if the applicant notifies the adjoining landowners only after the application has been filed. It seems unlikely that adjoining landowners will educate themselves on the rule and report the features on their own initiative. How can karst features on adjoining land be brought to IDEM's attention in time to impact the approval process? (IKC)

Response: It is the responsibility of the applicant to comply with the rule. The requirement does not end at the property line of the applicant. Most features can be identified visually.

Comment: In 327 IAC 16-6-9, add:

(3) Within twenty-four (24) hours of receipt of an application for a new or modified confined feeding operation, the department shall post on a website specifically designed for applications for confined feeding operations:

- (A) The name of the applicants, owner(s) of the animals, and operators.
- (B) The addresses of the applicants and operators.
- (C) The location of the proposed or modified confined feeding operation.
- (D) The number of animals to be fed and maintained at the proposed or modified confined feeding operation.
- (E) The number of animal units to be fed and maintained at the proposed or modified confined feeding operation.
- (F) The area and volume of any manure containment structure at the proposed or modified confined feeding operation.
- (G) Where and from whom in the department the full application can be obtained.

(NCE)

Response: IDEM believes this is a good suggestion. We will consider ways of providing this information on the IDEM web site, however, not as part of the draft rule.

Comment: In 327 IAC 16-6-10(a), (1) seems fine if agronomic rates include nitrogen, phosphorous and potassium. But, why is the (2) exemption needed? Why would not all operators fall under (1)? The same language appears in 327 IAC 16-9-4(b). (STV)

Response: This provision is now at 327 IAC 16-10-1. Provision (2) was added as a default amount for those who have not yet received results from the manure test.

Comment: In 327 IAC 16-6-10(b), any acreage agreements with other landowners should be on a standardized form provided by IDEM, stating that manure will be spread on their property and requiring notarized signatures. This is based on the comments we have repeatedly heard that operators often get their neighbors to sign by agreeing that they won't actually spread manure on their property. (HEC) Why should the small producer get written permission to put manure on land? (GG)

Response: IDEM will provide a standardized form that can be used for land use agreements. This provides protection for the land applier and shows that the producer has sufficient acreage to handle the manure generated.

Comment: You want land use agreements on manure being applied on our neighbors ground. Is that required in cities with their landscaping services? (DLSG)

Response: This draft rule does not pertain to city landscaping services.

Comment: In relation to required acreage, just what is agronomic rates? This is open to some differing interpretations. If manure is applied, is there a grace period to bring the ground into compliance? (SMC)

Response: IDEM is working with Purdue University and the Natural Resource Conservation Service to determine agronomic rates for different nutrients. The purpose is to prevent over-application which could enter waters of the state.

Comment: In 327 IAC 16-6-10(a)(1), insert "independent" before laboratory. (NCE)

Response: Independent laboratories are not prohibited, but IDEM does not want to limit the use of reliable field test equipment.

Comment: Commentors that want the use of N-meters to be allowed. (DW) (SW) (JELS2) (MBR) (SRF) (RJ) (CMI) (JDS) (JTH) (SRF1) (VF) (RY) (LOLRL) The costs of tests, such as mentioned in 327 IAC 16-6-5, will require a pork producer to spend \$40 for a laboratory test to check on nitrogen in the soil. How is this kind of rule going to improve my production or success as a farmer? How is this rule benefitting the farmer? (DDE) I feel the proposed lab test of analysis of nutrient value is unnecessary. (CMO) It would cost a fortune to have the tests like you want - soil test every 3 years would do the job. (PMO) 327 IAC 16-6-5(d) would mandate a costly test performed at a lab instead of using a tester provided by Purdue University that may be purchased for approximately \$300 and the

testing chemicals at \$1.00 per test. (SSC)

Response: N-meters may be used. IDEM does not specify any type of test. The purpose is to protect waters of the state.

Comment: As a lender, I think the time required for a permit approval is too long, buildings are usually financed on long term financing. When fixed rates are used, the cost of funds can increase or decrease a great deal in the 60-90 days or longer approval process. (JDN)

Response: IC 13-18-10-2.1 specifies that IDEM shall make a determination on an application not later than ninety (90) days after the date the department receives the completed application, including all required supplemental information, unless the department and the applicant agree to a longer time@. IDEM processes applications as quickly as practical. However, some time is required given the volume of applications and the steps necessary to provide an adequate technical review.

Comment: Approving CFOs in karst terrain requires a complete site evaluation by a licensed geologist to determine that the site would not be at risk in causing water quality degradation. Optimally, this evaluation would include the manure application acreage. (IKC)

Response: IDEM does not believe this is necessary. IDEM provides greater oversight in karst areas for construction of a confined feeding operation. IDEM does not believe manure application acreage needs to be included, because if the application rates are done according to the proposed regulation, the compounds of concern will be up taken in the growing vegetation.

Comment: I approve of your proposed grid sampling of soils and a nutrient management plan. (SMO)

Response: IDEM notes the comment.

Comment: In 327 IAC 16-6, add a new section to read as follows:

(a) The public within one mile radius of an existing or new industrial confined feeding operation may petition the department to inspect the operation for suspected violations or nuisance claims regarding any aspect of the management of the operation.

(b) At least 10 members of the public or, failing 10 residents, a majority of the members of the public who reside within one mile of the operation must file the petition.

(c) The department must respond to the complaint within three days.

(d) Any violations identified by the inspection must be reported immediately to the petitioners and corrected by the operator in responsible charge or control within one month.

(e) Failure to correct a violation shall result in revocation of the operation's permit.

(NCE)

Response: IDEM does not feel it is necessary to differentiate industrial confined feeding operations. IDEM needs the ability to respond to problems based on experience and knowledge.

Comment: Add a new Section 6.1 as follows:

Sec. 6.1 Farmstead Plan for Industrial Confined Feeding Operations

Sec. 6.1(a) A farmstead plan for industrial confined feeding operations must show all existing and proposed manure management systems, and within one (1) mile of the manure management systems, the following features:

- (1) Places of worship.
- (2) Schools.
- (3) Businesses, other than farms.
- (4) State, federal, municipal, and county parks.
- (5) residences.
- (6) waters of the state.
- (7) public and private roads.
- (8) water well locations.
- (9) drainage patterns.
- (10) property boundary lines.
- (11) drainage tile lines.
- (12) All outfalls of known drainage tile lines in subdivision (11) and the distance of the outfall from the proposed manure management systems.
- (13) Drainage inlets or Water and Sediment Control Basins.

(b) In addition to subsection (a), the farmstead plan must show the diversion of uncontaminated surface water.

(NCE)

Response: IDEM does not believe it is necessary to differentiate between industrial confined feeding operations and confined feeding operations.

Comment: Commentors opposed to a reference to local zoning. (NSCH) (ANON6) (HLS) (MW) (BRS) (BVF) (RTE) (EJN) (NESS2) (WHA) (MWC) (LTR) (ELW) (JGS) (JOY) (CVF1) (DTS) (LF) (JC) (ADP) (SHB) (JDE) (APE) (TB) (MDK) (JD) (MG) (LB) (MYA) (DPS) (CVF) (CLE) (CRE) (LLP) (RBA) (WLB) (PH) (TCW) (MHF) (RF) (LH) (RES) (CWS) (RN2) (MRE) (RFE) (RIF) (MSMO) (APA) (BLA) (JER) (KGR) (JLEM) (SRF) (NCB) (DMO) (BA) (LM) (AML) (JHO) (RV) (LN) (GSFP) (DJN) (SKH) (LNI) (DL) (MEN) In Rush County you have to have state approval before you can obtain county approval. How do I do this when your rule says I have to have county approval first? (RW) In 327 IAC 16-6-11, the second sentence needs to be removed for the rule to be legally adopted. (IPPA) We support this section on local zoning. It is consistent with IC 13-14-8 Section 4. This provision is necessary to prevent IDEM from wasting their time on approvals that don't meet local requirements. This provision also helps prevent local government from giving automatic rubber stamp approval of a project just because it has been approved at the state level. Application materials should include a letter confirming that the proposed operation meets local zoning requirements, if any. This would prevent IDEM from wasting taxpayers resources on projects that don't merit local approval. (HEC)

Response: IDEM has removed the reference to local zoning though applicants will still have to comply with applicable local zoning requirements.

Comment: Local zoning boards should not have the power to set up rules concerning livestock operations. (NN) A farmer should not have to seek permission from local zoning boards to build or improve CFOs in an agricultural zone. (MLR)

Response: IDEM rules do not affect or supercede local zoning requirements.

Storage Structure Location Restrictions

Comment: Siting restrictions should be at least as stringent as those for municipal waste landfills, and even more stringent where addressing odor concerns. Confined feeding operations should not be allowed to site in floodplains, floodways, wetlands, fault zones, seismic zones, mining sites, unstable areas, karst terrain, over sensitive aquifers, and in endangered species habitat. (HEC) IDEM should use language at 329 IAC 10-15-4 for a hydrogeologic site investigation report, and 329 IAC 10-16-2 through 329 IAC 10-16-9 for siting restrictions in or near flood plains, floodways, wetlands, faults, seismic impact zones, underground mines, unstable areas, karst, and aquifers. (NCE)

Response: The draft rule contains extra precautions for those areas or they are prohibited. Manure does not contain the same range or type of contaminants found in municipal solid waste leachates.

Comment: I am concerned about lagoons built in areas with porous type soils or areas with high water tables. I think that existing lagoons should be IDEM's highest concern but they should not be shut down, just monitored closely. The question IDEM must ask themselves is whether lagoons should continue to be permitted in the future? I understand they do permit lagoons for some home subdivisions as a means for human waste disposal. What is the difference between a spill between a lagoon with livestock vs. human waste? (GS)

Response: There would not be much difference between the two waste types. If lagoons are constructed

and operated properly, they do not pose a threat to ground water quality.

Comment: In 327 IAC 16-7-2, the language should be modified so that the CFO does not have to prove they did not construct in these areas which is very difficult. (IPPA)

Response: Compliance with the site restrictions in 327 IAC 16-7-2 should be determined prior to construction, not after construction.

Comment: Commentors that believe construction on 12% slopes should be allowed with proper engineering consideration and design. (IPPA) (AO) (IBCA) (NF) (BE) In 327 IAC 16-7-2(a)(2), the term ~~A~~must not be constructed~~@~~ should be changed to ~~A~~should not be constructed without designs certified by a professional engineer~~@~~. (KGR) (MY) (WH) (TCZ) (RY) 12% slopes seem steep. (WR)

Response: IDEM has removed the provision.

Comment: In 327 IAC 16-7-2(a)(4), we do not support construction of any manure storage structures in the 100 year floodplain. If manure storage structures are to be allowed in flood plains at all, applicants should be required to demonstrate that they will not restrict the flow of the 100-year flood, will not reduce the temporary water storage capacity of the floodplain, and have a bottom elevation not less than 3 feet above the base flood elevation. See IC 10-16-2(b). (HEC)

Response: IDEM believes that 2 feet above flood elevation is adequate for designing manure storage structures in floodplains. Construction in a 100 year floodplain requires IDNR approval and their requirements include several mentioned by the commentor.

Comment: In 327 IAC 16-7-2(a)(4), maps of the 100 year floodplain should be made available. (KGR) (SRF) (IPPA) (ABT1) (NG)

Response: Farmers should use existing maps available from IDNR. Construction in a 100 year floodplain is a problem. Guidance will elaborate on the use of modeling, historical data, or other alternatives for areas that are not adequately mapped.

Comment: We advocate an insertion of over~~A~~known~~@~~mines. (IPPA)

Response: IDEM believes this is sufficiently descriptive. No change was made.

Comment: Why would an owner be required to test down to 25 feet below the lowest point of the proposed manure management system in karst terrain or over mines? Would not 10 feet work just as well? (RY) No one would dig a hole twenty-five feet deep without just cause. (RRSO2)

Response: IDEM concurs and has changed the soil boring or test hole to be ten (10) feet rather than twenty-five (25) feet.

Comment: The rule considers the~~A~~manure management system~~@~~ and the manure application acreage as separate entities. In most cases, one cannot exist without the other and both should be considered when approving applications that are located in sensitive areas - specifically karst regions. While we

understand the need to segment the regulations in some manner, there remains minimal guidance (e.g., sinkhole setback) on manure application in karst regions. (IKC)

Response: IDEM does not believe it is practical to link confined feeding operation construction to manure application sites. Both are regulated in the draft rule separately.

Comment: We prefer that CFOs be disallowed entirely in heavily-karsted areas; anything less appears to provide insufficient protection to groundwater environment and to public health. (IKC)

Response: IDEM believes the additional information requirements about karst areas will provide sufficient protection to ground water and human health.

Comment: In 327 IAC 16-7-2(a), drop the IDEM and IGS 1997 karst map reference as these are not accurate maps and will always be incomplete as more field work is completed. All we need is knowledge of the location of carbonate rocks upon which karst is formed. (WR) In application of 327 IAC 16-7-2(a)(1), IDEM is encouraged to be liberal in the definition of karst areas, since applicants can still obtain site approval by providing additional information under 327 IAC 16-7-2(b). (IKC)

Response: IDEM believes the determination of karst areas under 327 IAC 16-7-2(a)(1) is appropriate. IDEM must balance the concerns of the environment with business.

Comment: The Indiana Geological Survey and the Indiana Cave Survey are working together to improve the current delineations of karst terrain. We see no need to restrict the information being used to the karst and bedrock map of 1997, when the IGS is continually gathering additional and pertinent information. (IKC)

Response: The karst and bedrock map is only to identify if the proposed site is in a karst area. The rule cannot reference maps or documents that are continually changing. Setbacks to sinkholes apply regardless of location.

Comment: Under 327 IAC 16-7-2(b), approval of the site in karst terrain/mines should consider not only the location of the manure management system, but also the manure application acreage if the definition of the manure management system does not include this acreage (327 IAC 16-2-23). (IKC)

Response: The setback from sinkholes address restrictions applicable to manure application acreage.

Comment: In 327 IAC 16-7-2(b), manure storage structures greater than .5 acres should not be allowed in karst topography. In karst terrain, soil borings to bedrock or 25 feet below the proposed manure storage structure will provide no information about the likelihood of sinkhole formation. (HEC) Pits, lagoons, and underground tanks should be banned in karst topography and other areas that allow rapid access to aquifers, such as highly fractured bedrock that is near the surface and natural subsurface drains. (NCE)

Response: Manure storage structure size does not equate to environmental protection. Karst has already been addressed by requiring more information to be submitted though the 25 foot soil boring has been changed to 10 feet. The site specific situation including underlying geology and proposed storage

structure needs to be taken into account to determine appropriate levels of protection in karst areas.

Comment: Under 327 IAC 16-7-2(b)(1), a soil boring provides little information on the suitability of the site for construction in karst terrain. Karst is formed in bedrock - hitting bedrock does not indicate that soluble crevices are not present that would provide direct leak paths for lagoons or manure applied on ground. (IKC)

Response: It is IDEM's experience that information obtained from soil borings is helpful in making determinations on construction in karst terrain.

Comment: In 327 IAC 16-7-2(b), the requirements do not recognize the potential complexities of a karst area and suggests that 25 feet of soil over a cave will not lead to collapse from lagoon loading. This section needs more help from a technical committee of geologists. (WR)

Response: IDEM consulted with geologists, engineers, and other environmental professionals in developing this provision. These conditions balance the complexity of the system and available design criteria. The 25 foot soil boring or test hole has been changed to 10 feet. IDEM feels adequate protection has been specified if guidelines are followed as provided.

Comment: Delete 327 IAC 16-7-2(b)(3). (NCE)

Response: The commissioner must have reliable proof that if a failure occurs in the subbase of the manure management structure, the result would not be the rapid release of the contents of the structure into the karst aquifer. This required demonstration would be to prove the structure would remain competent to contain the manure until the situation can be resolved, and the structure relocated.

Comment: 327 IAC 16-7-2(b)(4) should be deleted. (KGR)

Response: This requirement allows the commissioner to still consider locations which would not be otherwise approvable. The further testing allowed by this rule would allow the applicant to prove the ability to build a structure which can contain the manure in the selected location.

Comment: I understand the increase in soil borings and the additional requirements for earthen manure storage. I do feel that pit systems and concrete storage facilities can meet the expectations of water quality and safety. (MHF)

Response: These additional measures are required to protect the sensitive karst aquifer system. Karst aquifers are well known for their ability to transport water and contaminants long distances in short time frames, to discrete discharge locations. IDEM appreciates comments which recognize the need to protect these sensitive environments in Indiana.

Comment: Add a new Section 7.1. Storage Structure Location Restrictions for New Manure Management Systems at Industrial Confined Feeding Operations

Sec. 1. This rule applies to all new manure management systems at industrial confined feeding operations.

Sec. 2. New manure management systems for liquid or solid manure at industrial confined feeding operations must not be constructed:

- (1) in karst terrain based on information compiled by the department, and from karst and bedrock maps from the Indiana Geological Survey dated 1997;
- (2) on slopes greater than 12%;
- (3) in a floodway;
- (4) in a flood plain;
- (5) over mines.

Sec. 3. Except for 16-6-3(d), manure management systems for industrial confined feeding operations must be located to maintain minimum setback distances based on specific location distances in eight compass directions from an operation, using such factors as:

- (1) the prevailing wind direction and frequency in the area;
- (2) land topography;
- (3) land use, such as proximity and location of:
 - (A) schools;
 - (B) parks;
 - (C) places of worship;
 - (D) businesses;
 - (E) residences;
 - (F) other land uses included by the commissioner;
- (4) number and age of animals;
- (5) type of feed;
- (6) manure management practices; and
- (7) odor control technologies used.

(NCE)

Response: IDEM does not believe it is necessary to differentiate between industrial confined feeding operations and confined feeding operations.

Comment: In Rule 7, the Commissioner should be qualified to provide written documentation of the basis for requiring this information. (MSMO) In section 2(4), other information is a very broad statement and should be qualified. The Commissioner should have to provide written documentation of the basis for requiring this information. (IPPA)

Response: IDEM concurs and has added language to this effect.

Storage Structure Setbacks

Comment: Commentors that do not want setbacks for storage structures. (MCSW) (RHO) (FCS) (MK) (MY) (BBA) (GSC)

Response: The setbacks serve to provide protection to water quality. There is flexibility in the rule to reduce setbacks if equal protection to human health and the environment is provided. A considerable amount of time has been spent to develop reasonable protective setbacks. The rule allows flexibility for site-specific circumstances.

Adequate space is needed to contain a spill if manure was to escape the manure storage area, or a spill occurs when manure is being removed from the storage facility. IDEM has imposed setback recommendations for facility siting since the program began 28 years ago. An increase in setbacks for new structures will achieve a higher level of confidence that new facilities will be protective of the environment.

Comment: Setbacks should also address air quality concerns. We recommend use of the Heber model for protecting health and air quality of existing land users in the area. (HEC) The argument that there is no scientific evidence to justify setbacks currently in the draft rule belies the precedent set by the solid waste landfill regulations and by the National Pork Producers Association. Common sense and experience should be employed here to avert disaster and lawsuits. At the very least, the Heber model developed at Purdue University should be employed as a means to establish scientific parameters for setbacks. (NCE)

Response: IDEM does not have the authority to regulate odor under this Water Pollution Control Board rulemaking. IDEM is continuing to work with the regulated community through technical assistance and education.

Comment: There needs to be scientific justifications for the setbacks. (RIF) (CR) (DCPP) (IFB) (ICARD) (RFE) (WH) (TCZ) (WH) (TCZ) (AP) (RY) (IPPA) (DLSG) (WSJ) (SR) (VAA) (APE) Setbacks for locating a facility and for land application of manure need to be decided based on site specific condition as the sites, soils, sizes, and situations vary greatly across the state. (MLB) (SEL) What is the justification for the difference in setback distances between uncovered and covered liquid manure storage? (RY) What scientific information will be used for allowing the commissioner to require greater setback distances or setbacks to residences? (NG) Language requiring significantly increased

setback requirements should be eliminated. No scientific basis. (LN) (GCA) Is there a reason for doubling the storage setbacks? (RJ)

Response: IDEM concurs that site specific conditions should affect the setbacks for land application and for locating storage facilities. The land application setbacks reflect the method of application, type of manure, slope of land, and residue. Any site-specific determinations on setbacks will be documented.

Comment: The current AW-1 setbacks should be used in the rule. (DTS) (AB) (MSMO) (DC) (BSCH) (MMC) (RDR) (SG) (RDK) (ICARD) (BJRO) (BGUE) (SRF) (IBCA) (DCPP1) (TI) (DCPP2) (IBCA) (CAB) (TI) (PJH) (DTR) (APE)

Response: The AW-1 setbacks did not address public water supply wells or sinkholes. Even though setbacks were increased, flexibility is allowed through 327 IAC 16-5-1 should the owner/operator demonstrate a shorter distance will still meet the performance standards in 327 IAC 16-3-1.

Comment: The setback issues are too vague. So many are left up in the air in regards to the protection of human health and the environment. What does that mean? Are these odor setbacks? Whose interpretation would we use on this issue? It was noted that setbacks involved water wells. Would all of these wells be mapped? How would a pork producer know where these wells were located? (DLSG)

Response: Setback distances are specific and should be understandable to the applicant. The protection of human health and the environment is a criteria used by IDEM to measure if deviations from established setback distances are appropriate. Public water supply wells and water wells are mapped by IDNR. Farmers should reasonably know where wells are within 500 feet of a proposed manure storage structure.

Comment: One of the setback rules look like to me you are trying to control odor which you have no authority. The rules that apply to the property line have nothing to do with water quality or control. Those that apply to wells, sinkholes, drainage inlets, and waters of the state are justified. I do like that you can be flexible in the setbacks if need be. I would like to see that if anyone wants to build in the setback area they be notified and not have the right to object to any expansion I might consider or force the setback rules on me. (WSJ) (SR) (VAA) (APE)

Response: The property line setback actually is intended to allow adequate space to allow for contaminant clean-up of any spilled or released material from the waste management system.

Comment: Put setbacks on roads and homes, but not on property lines. (CMI)

Response: If manure is released or spilled from a waste management system, adequate space is needed to contain and remove the material.

Comment: I would like to see provisions for reduced setbacks for new technology that is equally protective of the environment and human health. (DTS)

Response: This allowance has been incorporated into the revised rule language in 327 IAC 16-8-2(c).

Comment: The water well setback seems small given other well sanitary setbacks. (WR)

Response: IDEM believes this setback is appropriate.

Comment: Setbacks for wells must include language that states "existing and known". (DZ)

Response: IDEM concurs and has made the change.

Comment: In 327 IAC 16-7-3(c), IDEM should be required to clarify that the greater setbacks would be for water quality concerns and insure in their written documentation in (d) that these are the issues they address. (IPPA)

Response: IDEM has added a requirement at 327 IAC 16-8-2(e) for the commissioner to provide written documentation.

Comment: We are in full agreement with the provision for a reduced setback. (IPPA)

Response: 327 IAC 16-7-3(e) provides a mechanism to obtain a reduced setback if it can be demonstrated that the proposed alternative approach is equally protective of human health and the environment.

Comment: In 327 IAC 16-7-3, setback distances for sinkholes should be measured from the rim or upper-most closed contour or obvious feeder channel. (WR) The sinkhole setbacks in 327 IAC 16-7-3(a) are inappropriate with regard to the point of measurement (i.e., the surficial opening or lowest point). This approach assumes that sinkholes only accept water/pollutants if they are open and/or at their lowest points. Sinkholes can and do pass significant water/pollutants without any visible openings and they often feed at multiple places, not just at the center. In addition, it is not uncommon for the radius of the sinkhole to itself exceed the stated setbacks. To be effective, setback measurement must be from the rim of the sinkhole. (IKC)

Response: IDEM believes that the concern with sinkholes is access to water, therefore, the setbacks are equivalent to those for waters of the state.

Comment: In 327 IAC 16-7-3, manure storage structure setbacks from sinkholes should be 1 mile, consistent with recommendations of the American Geology Association already submitted to IDEM. (HEC) (NCE)

Response: IDEM believes the design and construction requirements, and setbacks in 327 IAC 16-8 are protective enough.

Comment: If it is OK to have a manure management system 100 feet from an on-site well, why do we need a larger setback to anything else? If it is good enough for us, why would it not be just as good for someone else (off-site wells)? (RJB)

Response: IDEM believes that additional setbacks from a neighbor's well will provide additional assurance that there will be no impact on the well, thus reducing the likelihood of appeals of issued

approvals.

Comment: I would like you to consider limiting any pit, pond, lagoon or any holding structure of sludge, animal waste, or any environmentally damaging substance, to be located 2000 feet minimum, from any stream, creek, river, dredged ditch or floodway/flood plain. (RWI)

Response: IDEM believes the current setbacks provide adequate protection.

Comment: The storage setbacks are unnecessarily large and should be reconsidered. (RRSO1) Please think through the setback requirements for concrete storage structures and injected manure. (JDH)

Response: Manure application setbacks have been reduced for injected manure and flexibility exists when a producer believes they can meet the performance standard.

Comment: In 327 IAC 16-7-3(a,b), a buffer zone should exist around a pre-existing CFO which will not deter a CFO from future, reasonable expansion in any particular direction. (KGR)

Response: The owner of a confined feeding operation that anticipates expansion is responsible for acquiring whatever land is needed to accommodate an expansion in compliance with rules in effect at the time.

Comment: We feel reverse setbacks are extremely important to protect confined feeding operations currently in operation. (DPS) In 327 IAC 16-7-3, setbacks must work both ways. Does IDEM have regulations in place to keep people the same distance away from environmentally enhanced buildings? (C&C) (KSCH) (BUF) In 327 IAC 16-7-3(c), A may require a greater setback distance ... to residences and public buildings@ provides a reverse setback in only one direction. It is not fair. (LH) Reverse setbacks should be implemented to protect CFOs. (KBB) There needs to be reverse setbacks for the public on all setback language. (FCS) (DTS) We are concerned that a perceived odor setback@ could come into play with this rule. (KSCH) I do not agree that farmers should get the homeowners Approval@ to build future buildings on their own property. Why not make the homeowners get the farmers Approval@ before they build near the area the farmer lives? (BMM) 327 IAC 16-7-3(b) is confusing and provides for a reverse setback in only 1 direction. This is insufficient. More work is needed on this language. (IPPA) We believe the provision for a reverse setback needs to be made stronger than what is currently written. IDEM should be required to notify anyone moving into a setback area that this operation is located in an agricultural zone and that by moving within the setback vicinity, they give up the right to force CFOs to abide by setback distances. (IPPA) For pork producers protection a strong reverse setback is necessary. (DLSG) All setbacks should be considered two way setbacks. If we can't build or apply within a set distance of a house, etc., then they should also be required to observe these same separations from our buildings or potential application sites. (VAA) (APE)

Response: IDEM does not have authority to regulate reverse setbacks. This is the jurisdiction of the local zoning authority. IDEM does have authority to protect the environment and control discharges of contaminants.

Design and Construction

Comment: IDEM should explore proposed design and construction standards with focus groups from the building and agriculture engineering areas prior to its public hearing before the WPCB and final implementation. (IPPA) IDEM should set standards and allow owners of the CFO to outline how they will meet these standards. There should be room left for well designed manure management plans and structures that are outside your current restrictions, if water quality is demonstrated. (RY) I am generally in favor of the increases in design standards but am wondering whether the standards belong somewhere else besides the rule. To change a design standard, one would have to re-open the rule-making process. Perhaps a reference to a separate set of documents that could be updated or revised as the old guidelines were without opening the rule-making process. New design standards will cost more. (BE) Many of the design criteria should also be in a guidance document as recommendations rather than as a rule. Because of the proposed rule requires state-registered professionals to do a site evaluation and certify the design of manure structures, these professionals should decide the design and construction criteria needed. (JDH) (GSFP) The structure requirements are costly and without merit. (RRSO2) The construction and location of lagoons and manure storage are getting almost impossible. (DLW) Construction design overkill is an item of concern. (DSCHN) Why are these regulations for concrete pit design being changed so dramatically, what proof of failures are being used? Taking into consideration the size, depth, and surrounding soils, a simple formula for concrete strength and thickness would be sufficient for producers to use. (GS)

Response: The specific design and construction specifications will be referenced in a guidance document. IDEM has worked, and will continue to work, with all interested parties on these issues. The proposed rules do not specify how concrete and earthen structures are to be constructed. They give the standard to be used such as a soil liner with a certain permeability. Other materials or methods are acceptable if they provide equivalent environmental protection.

Comment: Through recent IDEM farm inspections, it was noted that very few manure storage systems were leaking thereby proving that current structural designs are sufficient. (PDF) (CFI)

Response: IDEM realizes that inspections allow observations of only a small percent of the pit walls. The standards remain unchanged from the AW-1 guidance document.

Comment: It should be included in the rules that all additional design standards and modifications be justified from a water quality standpoint. (RY)

Response: The written justification for increased standards would include the basis for such increases.

Comment: There does need to be a guideline for new structures being built, but asking for old structures to be brought up to your high standards in such a short amount of time is neither feasible or cost effective. (TF)

Response: There is no provision requiring existing structures to be reconstructed to meet the requirements of this rule, unless there is a water quality violation.

Comment: 327 IAC 16-8 Only prescribe storage capacity; they cannot prescribe management capacity. (IBCA)

Response: IDEM believes it is appropriate to prescribe management quality by establishing standards to be met to assure environmental protection.

Comment: IDEM will have too much authority to dictate the type of management practices and building designs that livestock producers will have to adopt. (LFI) If we build these buildings to specs like land maps, soil maps, soil probes, building specs, building designs and engineer should be provided by IDEM to look and see if everything is ok before we build. (MSMO)

Response: The current review process does review these specifications.

Comment: Our hog operation had to install a mound septic system to dispose of human wastes. How come none of our neighbors have to install a mound system on their new houses? Why doesn't IDEM require a septic system to be pumped every 3-4 years? (RA)

Response: IDEM does not regulate septic systems. They are regulated by the Indiana State Department of Health. Septic standards for the state are under review.

Comment: We are concerned about the turnaround time of testing results, slow down of construction, additional costs, and the accuracy of testing. The sum of these issues has not been adequately addressed in the workgroup process with IDEM. IDEM should call for further testimony and research into these lagoon standards prior to enacting the proposed rule. Cost benefit ratios must be considered prior to requiring items like synthetic liners, greater than 2 feet compacted clay, and monitoring wells on earthen storage structures. We also advise additional language by adding that the Commissioner shall provide written documentation for the basis of requiring additional design standards. (IPPA)

Response: The economic impact of the rule provisions will be addressed in the fiscal impact statement and considered prior to preliminary and final adoption. Many of the provisions noted by the commentor are not routinely required in the current version of the proposed rule. If they are required on a site-specific basis, each determination will be documented and subject to appeal.

Comment: These rules give too much authority to IDEM to mandate additional design standards such as liners, monitoring systems and other protective measures. We should instead be looking for ways of fostering performance based outcomes that take new technologies and existing site conditions into consideration. The producer and his engineers should decide parameters on a site specific basis rather than IDEM. (CKD) If engineers design systems and site specs, we don't need IDEM to say yes or no, - already done by Indiana laws and rules. (FJ)

Response: Requirements for monitoring systems, liners and other protective measures would only be implemented when needed to provide adequate protection to human health or the environment. IDEM encourages the development of new technology. The flexibility clause in 327 IAC 16-4-1 enables IDEM to consider and approve new approaches and technology. IC 13-18-10-1 requires that IDEM approve construction of confined feeding operations before construction begins.

Comment: On manure holding structures, I wonder if scientific test were done to support this whole section. (DLO)

Response: A precedent has already been established through the current AW-1 guidance document.

Comment: I believe that IDEM should be required to test ground water and prove if there is a problem and then work with the producer. (BBA)

Response: IDEM strives to prevent contamination of water, including ground water, so that there is no need to deal with problems. Allegations of contaminated ground water from confined feeding activities are rare. IDEM would allow a producer to select a means to remediate any problem.

Comment: I think that it is good for someone to help design storage pits, lagoons, etc. (LD)

Response: IDEM concurs.

Comment: The land-grant colleges should design environmentally sound operations and hold construction companies liable for environmental problems if they do not follow the design. Farmers should not be responsible for construction and design problems. (GG)

Response: Those who benefit directly from utilizing the structure should be the responsible parties.

All new manure storage structures

Comment: Redoing old concrete manure storage to bring it to 180 days storage should not be necessary for approval since the producer is only improving his building and for sure should not have to be reported to neighbors who may overreact. (SMC) I agree with the rule of 180 days storage because there are days that the farmer can't haul manure. A bigger storage is good. (LD) The 120 day storage rule is fine - don't change it. (RC) We suggest that the storage time recommendations be left at 120 days and site specific changes would be dependent upon an individual operation's manure management plan. (IFB) I have problems with detention time. I would suggest more application time versus storage capacity to prevent spread of disease and promote cleanliness of the operation. (RRSO1) The extension of holding periods from 120 to 180 days may increase odor in a majority of instances, thus causing lawsuits or unwanted complaints from neighbors. (JELS2) I would think all producers should build for 270-360 days storage. (GS) In 327 IAC 16-8-1, 180-day storage capacity is appropriate since our growing season is sometimes longer than 120 days and we occasionally have long winters. However, exceptions should be made for operations that do not simply store and land apply untreated manure. Operations that treat and recycle wastewater to their barns should not be required to have 180-day storage capacity. (HEC) In 327 IAC 16-8-1(a), 180 days storage should be changed to 120 days storage because previous rules used 120 days, and the 180 day rule for solid manure could double the cost and for liquid it will increase the cost from 20-50% for new storage. Dairy producers need to haul manure on cropland when crops aren't there. This means in spring and fall. There isn't justification to have to construct 180 day storage when storage is only required for periods of frozen ground or less. (LOLRL) Why do we need 180 days manure storage in new construction? That implies only 2 applications per year. We usually apply manure 4 time per year. (GSFP) (SEL)

Response: The 180 day storage requirement is only for new construction. Most construction currently being approved is for 360 days or more. The flexibility provision in 327 IAC 16-4 can be used to build with less storage capacity under certain circumstances. IDEM has documented multiple overflows and

compliance problems with 120 day or less storage capacity.

Comment: Some operations should be required to have longer storage requirements, some have no need for more than 4 months. Operations located on soil types that are susceptible to rainfall interfering with application, should have longer storage times. The ability to develop a site specific plan is important and should be encouraged. (MY)

Response: Storage detention time equates to management flexibility. If an operation knows the performance standards, they can determine themselves if greater flexibility is needed.

Comment: In 327 IAC 16-8-1(a)(4), why is the lagoon area excluded? (WR)

Response: The 2 foot freeboard that must be maintained accounts for the precipitation that falls directly on the lagoon.

Comment: Section 1B could withhold permit on soil type even if the buildings were made for the soil. (MSMO)

Response: Under certain soil conditions, standard requirements may not be adequate to protect surface or ground water. This provision gives IDEM the authority to take site specific conditions into consideration.

Comment: In 327 IAC 16-8-1(b), how is soil strength determined? (WR)

Response: Soil strength is determined using engineering calculations based on soil types.

Comment: When you want a tile at least 3 feet from a manure structure to lower the water table, it would be safer to not put the structure so far in the ground and bank the sides with the dirt taken out of the area. One rule is that you want the manure structure kept away from the tile and another is that we are o.k. to be 37 feet from the manure structure. IDEM should try to get these rules to be consistent. (EML1) Manure storage structures should not be allowed in areas where the high water table would be within 2 feet of the bottom of the structure. Lowering the water table with drainage tiles should not be allowed. (HEC)

Response: Lowering the seasonal water table poses no risks and is a common practice to reduce structure exposure to water pressure.

Comment: In 327 IAC 16-8-1(c), how is the seasonal water table measured without monitoring wells? How could it be otherwise demonstrated? (WR)

Response: The seasonal water table can be determined from soil maps, or site soil borings.

Comment: In 327 IAC 16-8-1(d), could water supply lines be impacted? (WR) I agree with enclosing water lines that come through the pit. (EML1) Isolating water lines from manure is unnecessary. (FCS)

Response: IDEM had removed the requirement and will address it in guidance.

Comment: Section 1E broadens IDEM authority for additional standards as they see fit. (MSMO) In 327 IAC 16-8-1(e), how will the determination be made? (WR)

Response: The determination will be made based on site-specific information resulting from the initial site assessment and possibly other sources such as maps, surveys, or other assessments.

Comment: The additional design standards suggested in 327 IAC 16-9-1(e) will not prevent catastrophe when a new sinkhole forms in karst terrain. That is why we keep insisting that approvals should be denied in karst and other sensitive areas. (HEC)

Response: IDEM believes the additional information requirements about karst areas will allow operations to site and construct waste management structures which increase protection to water, and are located in areas which are not likely to experience subsidence related to the farm activity.

Comment: In 327 IAC 16-8-1(e), the terms **A**highly permeable soil~~@~~ and **A**high water tables~~@~~ are not defined. The additional standards should be required for such areas and for earthen storage structures, not optional at the discretion of the commissioner. (STV)

Response: Waste storage facilities vary significantly and the determination to require additional or increased design standards should reflect the site specific conditions in conjunction with the facility proposal.

Comment: In 327 IAC 16-8-1(e), delete **A**if determined to be necessary~~@~~, and change the word **A**may~~@~~ to **A**shall~~@~~. (NCE)

Response: IDEM does not believe this is necessary.

Comment: In 327 IAC 16-8-1, add:

(f) The commissioner may require additional standards under (e), such as:

(1) innovative technology; or

(2) other protective measures.

(NCE)

Response: The commissioner already has this ability under 327 IAC 16-6-2(c)(2), 327 IAC 16-6-3(a), and 327 IAC 16-8-1(e).

Comment: We support prescriptive rules for construction of manure storage structures. The regulations for solid waste land disposal facilities under 329 IAC 10 should serve as a model for developing regulations for lagoons of 1,000 animal units or greater. Animal waste storage structures should be subject to similar requirements because they are likely to leak due to the corrosive, liquid nature of the waste. (NCE)

Response: The design standards are considered reasonable and protective of surface and ground water. Specific requirements will be discussed in the guidance document and will be based on NRCS construction and design standards.

Comment: I suggest no new lagoon construction be allowed and a time limit (2 to 3 years) when all existing structures be emptied and leveled and the land be returned to its original condition. All manure should be stored in leak proof pits under buildings with a 90 to 120 day storage capacity. This would apply only to hogs raised under confined conditions. (STF)

Response: The draft rule design requirements are designed for all facilities to prevent environmental harm. IDEM's compliance monitoring inspection program has focused on assessing existing storage structures. Those found to be inadequate have been required to reconstruct, modify or terminate use. The current rule language is calling for one hundred eighty (180) days storage for new structures. The species of animal does not influence the level of potential harm from the manure. A ban on new lagoon construction has not been considered and is not advocated as part of EPA's federal strategy as well.

All new liquid manure storage structures

Comment: In 327 IAC 16-8-2(b), we support the concept of an emergency spillway, but if the spillway results in contaminants entering waters of the state, enforcement action should be taken. (HEC)

Response: IDEM intends to take action if contaminants enter waters from an emergency spillway.

Comment: The secondary containment and emergency spillway is a good rule to protect state waters. (EML1)

Response: IDEM concurs.

Comment: In 327 IAC 16-8-2(d), the requirements for without leaking, backflow prevention and shut-off valves is unrealistic. (DTS) 327 IAC 16-8-2(d) This entire section should be moved to a new guidance document. These items are practices that can be used to meet the performance standard. They should not be in the rule in that they are too management prescriptive. (IBCA) 327 IAC 16-8-2(d) should specify that Manure transfer systems must be covered. (HEC)

Response: IDEM had removed this provision. IDEM does not believe manure transfer systems need to be covered as long as the manure is completely contained in the pipe.

Comment: Section 2d needs to rewrite this you will have some leaking hooking and unhooking hoses need to decide if it is an environmental threat. (MSMO)

Response: This section was modified to state that transfer systems must be designed and constructed to minimize leaks, seepage, and prevent spills.

Comment: Some sensitive areas should not have manure storage structures, period. We are not sure what ~~A~~higher compaction~~@~~ means. We would like to see hydraulic conductivity spelled out. We are not sure it is feasible to achieve hydraulic conductivity less than 1×10^{-7} cm per second through additional compaction. (HEC)

Response: Some soils can be compacted more than others. Those soils that are difficult to compact may need amendments such as bentonite clay or the use of a synthetic liner.

Comment: Covering pits and lagoons where feasible makes sense for safety reasons and to prevent a loss of inherent nutrient value. (RRSO1)

Response: Though IDEM encourages operations and owners to cover pits and lagoons, it is not a requirement of this rule.

New concrete storage structures

Comment: ~~A~~Water tightness~~@~~ is too extreme and impossible by the strictest of interpretations. (RTJ) With your proposal for a professional engineer and a watertight structure, this proposal will run the building costs up about 15% in unnecessary expense. (RHW) ~~A~~Watertight~~@~~ opens up a Pandora's box of added construction cost plus the potential for trivial violations. All other provisions of this section are just common sense and are already aspects of good quality construction. (AP) Watertight construction would be an increased cost. (WLB) (SHDL) The rule should set up construction guidelines and allow those who know construction and science to build watertight structures. This rule should be about water quality not construction guidelines. (MBR) It is unreasonable to require watertight manure storage facilities and still increase the setbacks from water sources. (KGR) Section 3A No concrete facility is going to be completely watertight. If you use good concrete, joints that are properly spaced, rebar, and a good foundation and location, there should~~n~~ be any environmental hazard. (MSMO) In 327 IAC 16-8-3(a), to require a concrete storage structure to be watertight will add considerable cost to the building. (DTS)

Response: The design requirements for all concrete liquid manure storage structures has been modified to reflect uniform performance standards with earthen storage structures in the form of a seepage rate.

Comment: 327 IAC 16-8-3(a-c) should be in the guidance document, not the rule. (SRF) 327 IAC 16-8-3 (a)(1) through (6) These numbered items should be moved to guidance in that the preceding sentence establishes a performance standard of watertight and structurally sound. (b) Again, this is prescriptive language explaining how to meet the already established performance standard and, thus, should be moved to guidance. (IBCA) (AML)

Response: IDEM has removed the provision on inlets and outlets and will address it in guidance.

Comment: In 327 IAC 16-8-3, requiring ~~A~~a concrete mixture that is well proportioned and consolidated~~@~~ is insufficient. Concrete waste pits must withstand tremendous pressures as well as exposure to a corrosive material. They must be designed and constructed according to the American Concrete Standard 350 R-89. These facilities should be inspected by IDEM during construction and the contractor should be required to sign an affidavit affirming that construction was consistent with the

design. This will protect owners and operators (as well as Indian waters) from inexperienced to unscrupulous contractors. (HEC) Language should be restored requiring concrete lagoons to be constructed according to the American Concrete Standard 350 R-89. (NCE)

Response: IDEM believes the ACS 318 is appropriate for the construction of concrete manure storage structures. This will be provided as guidance. ACS 350 R-89 is for wastewater treatment plants.

Comment: 327 IAC 16-8-3 This should read: A constructed settling basin or low velocity channel must be designed as per NRCS or MWPS recommendations and have sufficient capacity to store the expected sediment for a period of at least one month. (AML)

Response: IDEM will continue to discuss the use of these systems to reduce unbridled stormwater releases. The sediment storage capacity could be justified to vary dependent on site specific conditions. More information will be provided in guidance.

Comment: 329 IAC 16-8-3(a)(6) Water stop membrane would add as much as 10% to the construction cost with nearly zero environmental benefit. Manure is self-sealing. If it leaks, it would leak into the sub-soil which is acceptable material for the lining of manure lagoons. The pit manure and the ground water would be at equilibrium and neither the manure nor the groundwater would move due to this equilibrium condition. (JST)

Response: In many areas of the state, ground water and seasonal ground water levels vary throughout the year. When levels vary there is no equilibrium of pressures. Subsoil is acceptable provided it is properly compacted to meet the seepage rate of the rule.

Comment: The following rule needs to be clarified or revised: 327 IAC 16-8-3(b)(2)(a&b) New concrete storage: explain water tight and solids removal (BL)

Response: The section on inlets and outlets has been removed. The section on new concrete manure storage structures has been revised to include an acceptable seepage rate.

New earthen manure storage structures

Comment: Details for new earthen manure storage structures for liquid manure should be placed in a guidance document. Let the owner working with NRCS and engineers develop the best design for the soils in which it is to be built. (RY)

Response: IDEM concurs. Lagoons are now required to be designed by a certified professional engineer and will allow the engineer to address site specific conditions by adjustment of the design. IDEM allow for flexibility in requirements as long as environmental protection can be demonstrated.

Comment: We urge IDEM to require for lagoons without liners three feet of compacted soil having a hydraulic conductivity of 1×10^{-7} centimeters per second or less and a twenty foot separation between the bottom of lagoons and aquifers. (NCE)

Response: IDEM believes 2 feet of compacted soil is sufficient.

Comment: 327 IAC 16-8-4 should state how the hydraulic conductivity is to be determined, and how equivalency with the 1×10^{-7} cm per second will be established. IDEM should inspect the facility before it is put into use to ensure that it is built according to design specifications. (HEC)

Response: The hydraulic conductivity will be determined by testing. IDEM's inspection program intends to provide greater oversight of construction activities.

Comment: Synthetic liners should be required for earthen lagoons for operations of 1,000 animal units or greater. Monitoring wells should be required in all instances for both earthen lagoons and concrete pits. These should be sited and maintained based on provisions in the landfill regulations. (NCE)

Response: The use of synthetic liners is an option. The draft rule has a provision to allow monitoring wells if needed, but IDEM believes they are not always necessary.

Comment: In 327 IAC 16-8-4, manure earthen structures should not be required to meet landfill and toxic waste facility standards. (MSB) We question construction to the same permeability rate as solid and hazardous waste facilities. We are concerned about the ability of construction practices to reach this level of compaction. (IPPA)

Response: The design requirements for an earthen manure storage structure are not the same as for a solid waste or hazardous waste landfill. A MSWLF is required to have 3 feet of 1×10^{-7} cm/sec soil liner and a geomembrane. The permeability rate will not be the same since there is no geomembrane. This is not a difficult level of compaction to achieve. Additional information will be provided in guidance.

Comment: 327 IAC 16-8-4(b) and 327 IAC 16-8-5(a) are open ended and not easily understood by the normal layman. (SSC) The requirements for an earthen lagoon are cost prohibitive. The required testing by IDEM may cause slow down of construction, additional costs and question the accuracy of the testing. (DTS)

Response: This section has been amended for clarity as well as to allow for flexibility to demonstrate alternate methods that would be environmentally protective.

Comment: 327 IAC 16-8-4(c) Prescriptive language that explains how to meet the performance standard. Move this section to guidance. (IBCA)

Response: IDEM concurs and has removed this provision. It will be addressed in guidance.

Comment: In section 4(d), the request for additional information from the commissioner should be justified in writing. (SRF) Section 4d needs to have written documentation for the basis of requiring additional designs. (MSMO) In 327 IAC 16-8-4(d), how will the determination be made? (WR) This gives IDEM broad authority without scientific basis to make costly changes. (DTS) IDEM should let engineers design earthen storage based on site location. The commissioner should justify additional conditions in writing based on water quality. (RY)

Response: IDEM concurs and has added this in 327 IAC 16-8-7(e). Determinations will be made using standard engineering evaluation measures and evaluating documentation from the applicant.

Comment: We agree in principle with the certification of lagoon design by a registered professional engineer, however, we are concerned about the limited number of registered engineers available for certification, especially engineers who know about CFO requirements. We favor broadening the definition to allow university-trained engineers and construction managers who are trained in lagoon design to provide certification. IDEM could create a mechanism where the credentials of individuals who may certify lagoon design are on file at IDEM. (IPPA) In 327 IAC 16-8-4(e), if the lagoon is designed by an engineer, then why does the producer have an additional expense and time to have a registered professional engineer certify it? I would suggest to include university-trained engineers and construction managers to also have that authority. (DTS) In 327 IAC 16-7-3 and 327 IAC 16-7-6, we believe these structures should also be certified by a registered professional engineer, just as is the requirement for new earthen manure storage structures. (STV) Requiring a registered professional engineer for design certification is a good thought, but it severely limits the number of person available and how much extra will this cost the farm? Why not any university trained engineer? With all of the plans and specifications that must be submitted to the IDEM for approval, is this extra expense necessary? (MSB) The increase in design requirements will cost more due to the need for registered professional engineer certifications on designs. (JELS2)

Response: There is no evidence that there are not enough registered professional engineers in Indiana to handle certification of lagoon design. IDEM is confident that adequate help is available. IDEM has tried to strike a balance by requiring the design to be certified by a registered professional engineer and that certification of construction is done by the applicant. This requirement was deemed necessary due to the various soil types and locations a lagoon could be constructed in. There is no one size fits all design that would apply to the entire state or every situation. The proposed rule provides for a performance standard and has great flexibility. IDEM believes that because of the site specific attributes that would go into a design for an earthen lagoon, it would be environmentally prudent to ask for certification that the design met the standard. IDEM is working with NRCS to develop pit designs which will be acceptable, given specific circumstances. Concrete pit designs are not required to be certified by a registered professional engineer. Guidance will recommend that the applicant obtain certification of proper construction by the builder. The variability with earthen lagoons needs a higher degree of assurance. Staff are always open to answering questions about any aspect of the rule.

Solid manure storage structures

Comment: Why does solid manure in an uncovered manure storage structure need to be covered? In a fescue field you can see in the grass just how far the nitrogen has gone. Put the pile of manure on top of a hill. That way it has no water running to it and farther. (KYL) I question the need to cover solid manure storage structures. If water is not flowing out of these structures with nutrients, why should it matter if it is covered? (JPM)

Response: Solid manure should be covered to keep precipitation from coming in contact with the manure and generating contaminated runoff.

Comment: In 327 IAC 16-8-5, the liner wither should be compacted or have a natural in-place

conductivity. How will it be measured? Why so high (10⁻⁴)? (WR)

Response: The liner will be measured using standard engineering procedures. The hydraulic conductivity is 1 x 10⁻⁴ cm/sec because of the clay type soil.

Other (tanks)

Comment: In 327 IAC 16-8-6, the requirements that IDEM is requesting is setting the producers up for failure. (SRF)

Response: IDEM disagrees. The requirements provide clear guidance for producers as to what is and is not allowed and what is environmentally protective.

Comment: I agree with no steel underground structures. (EML1)

Response: IDEM concurs.

Comment: In 327 IAC 16-8-6, it should be made clear that this section also applies to treatment facilities. Language should be added to require secondary containment for above ground tanks. (HEC)

Response: Manure storage structures as defined in 327 IAC 16-2-24 includes tanks that are used for storage or treatment.

Comment: Provisions in the rule pertaining to fiberglass/plastic tanks are inadequate. Provisions should be added that reflect the underground storage tank regulations for installation and inspection of these tanks. (NCE)

Response: IDEM believes the provisions are adequate for tanks that will be holding manure.

Comment: The following ~~Arule~~ needs to be clarified or revised: 327 IAC 16-8-6(b)(2) Other manure storage: animal waste storage requirement different than human waste? (BL)

Response: This language has been revised. It is unclear as to the analogy being drawn between human and animal waste and its relation to the rule language.

Comment: In 327 IAC 16-8-6, add: ~~A~~(6) Tanks must be installed by a certified installer according to underground storage tank regulations~~@~~ (NCE)

Response: IDEM does not believe this is necessary for manure.

Vegetative management systems

Comment: In 327 IAC 16-8-7, please specify that the infiltration area is to be used only for runoff during storm events. (HEC)

Response: An infiltration area should be operated in accordance with its specifications, which would

not allow for disposal.

Comment: 327 IAC 16-8-7(c) This propose rule is unacceptable in that designs by the Midwest Plan Service provide for a 25 year 24 hour precipitation event. (IBCA)

Response: The requirement in 327 IAC 16-8-7(c) is from the NRCS standards.

Constructed wetlands

Comment: 327 IAC 16-8-8 seems acceptable, but monitoring wells should be installed to ensure that nitrate contamination of groundwater does not occur. (HEC)

Response: The use of constructed wetlands would be controlled through permits. There would be appropriate monitoring under an NPDES permit if there were discharges. If there were no discharges, it would be handled as manure and applied to land and subject to 327 IAC 16-10.

Construction

Comment: Some of the new construction requirements are unnecessary and the cost is unjustifiable for the negligible benefit. (JLA) The new construction mandates for concrete storage are expensive and unnecessary. (DR) (DGF) Solid outside storage must have roofs - this would put a considerable financial burden on me. (FK)

Response: IDEM believes that the construction requirements are necessary. While the cost of constructing a new structure may increase, the potential for costly repairs and cleanup activities will be reduced. There is no requirement that solid manure storage have a roof.

Comment: In 327 IAC 16-8-9, we believe the performance standard should say that the manure management system minimize spillage during movement of manure. IDEM needs to be realistic in its understanding that the nature of manure transfer systems do not insure watertightness. (IPPA) Concerning the no seepage rule, there has to be some allowance based on how much has seeped and where it ended up. Concrete is guaranteed to get hard and to crack. Minuscule amounts of leakage hundreds of feet from water or wells should not constitute a violation. (DHF) No seepage or leakage from my operation at any time is unreasonable. (NN) (CAD) (DGFA) (KWI) (AJK) (DHI) We definitely need laws for everyone to help stop pollution. When I see rules such as threaten to cause and no seepage or leakage, I know there is no way for me to survive. (LB) I am extremely opposed to the ruling that no leakage may occur in storage, transfer, or transport at any time, regardless of whether the leakage gets into any waterway of the State. (DF) (WW) (RJMC) (DSL) There will be some minor seepage or leakage from the transfer system until pressure is built up and when shutting the irrigation system down, but it is no threat to the waters. (EML1) It is economically impossible to prevent some minor collection of manure on tires, etc. that will go onto the road. How do you distinguish waste spillage and that off the tractor tires? (RJ) Do not approve of no seepage or leakage of manure from any operation, no matter if it enters water ways not incurring a violation and perhaps a fine if any seepage or leakage occurs. (APA) The goal of absolutely no leakage or seepage of manure is unattainable and should not be considered unless it enters water. (BLA) The term no seepage bothers me. (NG) 327 IAC 16-8-9 states that I must construct all manure management systems to prevent seepage. On our

tight soils it would seem a waste of time and money to construct a pit under the building watertight, to prevent seepage, only to then remove the manure to an earthen lagoon constructed of the same material surrounding the concrete pit. This rule should be subject to the permeability of the soil. (CWS)

Response: IDEM has changed the language to say that manure management systems must be constructed to prevent spills, and minimize seepage and leaks. The performance standard is to design to prevent leaks and spills, but construct to the approved plan.

Comment: Section 9A what amount of manure would be considered an environmental threat? (MSMO)

Response: Manure does not have a reportable quantity. Threat is relative to site-specific conditions.

Comment: Commentors opposed to a 7 day notice to begin construction. (DPS) (RES) (RHW) (IPPA) (RIF) (SHDL) (RY) (RD) (WSJ) (LF) (DCPP1) (JC) (GSFP) (TI) (BE) (APE) (DCPP2) (CWS) (RRE) (AP) (DCPP) (RML) (DTS) 327 IAC 16-8-9 (b) If the goal of this provision is to ensure a construction inspection then say so. An operation that is beginning construction must have an approval and therefore should be given the right to construct. We recommend that "The owner or operator shall notify the commissioner when construction on a new manure management system begins." (IBCA)

Response: IDEM has changed the requirement to provide notice when site preparation begins.

Comment: Notifying IDEM when I am ready to start construction is completely unnecessary. (NSCH) (ANON6) (HLS) (MW) (TWF) (DTH) (BVF) (RTE) (LT) (EJN) (CK) (AGRI) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (NESS2) (WW) (RJMC) (DSL) (DBA) (PMC) (MRE) (LK) (KA) (MWC) (LTR) (BMM) (TV) (GLM) (CVF1) (ICARD) (EML1) (DLSG) (MY) (MSMO) (SRF) If this rule is make law and you approve our construction, then if something fails, we should be able to fine you. (MRE) In 327 IAC 16-8-9(b), the term *shall* should be changed to *should*. (KGR) The following *rule* needs to be clarified or revised: 327 IAC 16-8-9(b)(c)(d) Construction req.: Why repeat notification of commissioner if CFO plan is already approved? (BL)

Response: Notification of construction is necessary in order to allow for inspection of construction as appropriate.

Comment: In 327 IAC 16-8-9(c), the possibility of a testing requirement to verify construction of an earthen liquid manure storage structure is potentially unnecessary and overly burdensome and costly on a CFO. The verification is already covered in 327 IAC 16-8-9(d). (KGR) In 327 IAC 16-8-9(c), testing for verification should be a decision left up to the operator. If they deem it necessary, they should have the right to enact such testing based on their own will. (IPPA) If hired done why should the producer or owner state *to the best of his knowledge*. (RIF) Section 9C. This is taken care of in section D. D. This needs to read to the best of applicant's knowledge. (MSMO) In 327 IAC 16-8-9(d), the term *to the best of the applicant's knowledge* should be added prior to *that a manure management system was constructed* in accordance with the requirements of an approval. (KGR) We support language that requires the builder to *certify* that the structure was built according to design. (HEC) The mandatory affidavit to IDEM stating that a manure management system was constructed and will be operated in accordance with regulations should include language such as *to the best of my knowledge*. The

owner/operator of a new system will have to rely on the expertise of engineers and construction experts to ensure that regulatory requirements are met. (RES) (DTS) An affidavit, under penalties of perjury is quite harsh. Wording such as "to the best of the applicant's knowledge" would serve the same purpose. If not changed, shouldn't we also put this rule in for the contractor building the manure management system? (AP) We are farmers not engineers, much less engineers with credentials you require. (RML) Why do I have to send the commissioner and affidavit saying construction is completed? (RRE) 327 IAC 16-8-9(d) deals with an affidavit dealing with the construction of a facility. The applicant should only be held responsible for these details "to the best of their knowledge" (APE)

Response: Verification testing is only for earthen manure storage structures. IDEM needs to be able to determine that the structure is sound. IDEM believes the statutory requirement in IC 13-18-10-2.2 of having the applicant submit an affidavit is sufficient. The owner is liable if problems occur. The owner can pursue the builder if there is a contractual obligation. The applicant should hire consultants, engineers or contractors to assure the structures are built in accordance with the approval. It is recommended that the producer obtain a similar affidavit or written assurance from the contractor building the structure. If additional assurance is desired by the producer, they may hire a consultant or engineer to oversee the construction.

Comment: In 327 IAC 16-8-9, monitoring wells should be required. The rule should specify what constitutes site preparation and what constitutes the beginning of construction. The rule should specify that construction may not begin until the application has been approved. (HEC)

Response: IDEM can require monitoring wells if deemed necessary to protect human health or the environment under 327 IAC 16-8-3(c). Specific descriptions of what constitutes site preparation versus construction will be addressed in guidance. The rule specifies that construction may not begin until the approved by the commissioner in 327 IAC 16-6-1(b).

Comment: In 327 IAC 16-8-9(d), replace the current language with the following:

(d) Within thirty (30) days after the date construction of an approved manure management system is completed and prior to the introduction of animals, the operator on responsible charge or control shall:

- (1) execute and send to the commissioner an affidavit under penalties of perjury that a manure management system was constructed and will be operated in accordance with the requirements of the approval; and
- (2) submit to the commissioner a certification signed by the owner and the builder of the manure management system the completed manure management system was constructed according to the approved design.

(NCE)

Response: IDEM believes the affidavit from the applicant is sufficient. There is not always only one builder. IDEM considers the owner liable.

Comment: You do not have the right to tell hog producers how to construct their facilities. Local zoning

boards do this in our area. It is already a nightmare to get a permit to construct such buildings. (TF)

Response: The draft rules do not specify how facilities are to be constructed; however, the structures must meet the performance standards in 327 IAC 16-3-1 and the requirements of 327 IAC 16-8-12.

Comment: Construction guidelines are an area of concern. (MCSW)

Response: It is unclear what concerns the commentor is referring to.

Operations

Comment: Many of the provisions in Rule 9 should be moved to guidance. With the exception of emergency response plans and some language to address and encourage farm recordkeeping actions, this rule is unnecessarily loaded with micromanagement of a farm. (IPPA) Operational standards should be in guidance. You should provide the parameters that we all agree would protect water quality and we farm with meeting them. (SRF1) This rule could be labeled **Other Requirements** and contain the sections on manure marketing and distribution, staging, emergency spill response plan and recordkeeping. Self-monitoring and manure management requirements should be in the guidance document. (SRF) Operational requirements should be included as guidelines and not stated rules. This allows a producer and his consultants flexibility in deciding proper management practices to protect waters of the state without requiring unnecessary financial costs from unwarranted management practices dictated by IDEM. Excessive management requirements provide another opportunity for a producer to be cited for a violation, even though no environmental harm results. (CKD)

Response: The provisions in the draft rule are those that need to be enforceable. Guidance documents are not enforceable. The current draft provides flexibility in 327 IAC 16-4 to allow for alternate compliance approaches for operational standards.

Comment: Many of these sections are not outcome water quality based. (BBA)

Response: IDEM believes these sections contribute to water quality protection.

Comment: We are assuming our current permit is still going to be valid, as it should be, but rule 9 lacks the clarity that this is the case. Please be sure we all do not have to go through the permitting process again. (KSCH) In 327 IAC 16-9-1, what does this mean for CFOs approved prior to the new rules? Language needs to be inserted that acknowledges all existing CFOs prior to the date of the new rules. (IPPA) (APE) I think older facilities should run at AW-1 standards until they are torn down because we can't move these buildings and with new setbacks they will be in violation. (MSMO)

Response: Existing CFOs are not required to comply with location restrictions or design and construction standards in 327 IAC 16-8 unless use of an existing structure results in manure entering waters of the state. However, existing confined feeding operations will be required to comply with operational requirements in 327 IAC 16-9.

Comment: 327 IAC 16-9 Nearly all of the proposed rules in this section address the performance standard already established in Rule 3. There are specific rules that make sense to be addressed in this

section. (IBCA) 327 IAC 16-9-1 All this does is re-address the previously established performance standards. (d) Move this provision to the solid storage section of the proposed rule. (IBCA)

Response: IDEM concurs and has deleted this provision.

Comment: In 327 IAC 16-9-1, you give no tolerance to such terms as leak and seepage in equipment used for manure storage and transfer. (JLEM) Prevent seepage, leaks or spills is unrealistic. (DTS)

Response: IDEM has changed the language to read minimize seepage and leaks, and prevent spills.

Comment: In 327 IAC 16-9-1(d), dead animal compost operations are covered by the Indiana Board of Animal Health. (NG) (IPPA) (RIF) (MSMO) (BE) 327 IAC 16-9-2(a) is too broad and is already covered by DOT rules. (MSMO) (KGR) (IPPA) (RIF) (DTS) 327 IAC 16-9-2 is too broad and covered under another section. (RIF)

Response: Dead animal composting is referenced by the Board of Animal Health, but standards for environmental protection for compost operations is not the concern of the Board of Animal Health.

Comment: Having a drop of manure come from you in transit is not a threat to cause environmental damage. (BILF) (DW) (JLB) It is ridiculous to think that a few drops of manure spilled when disconnecting a hose from a manure tank can be considered a discharge. If reported, is this considered a violation? (RW) If I spill 3 gallons of liquid manure during a hose hook-up, can I be fined and written up? (GWB) What kind of problem can a small amount of manure from a disconnected suction hose cause? (EML1)

Response: IDEM concurs that de minimus spills of manure during transport does not impose an environmental threat. IDEM will use discretion to decide if a threat exists.

Comment: 327 IAC 16-9-2; There is no definition of unauthorized premise and is completely unnecessary in these rules. (KGR)

Response: Unauthorized premises are areas not approved for land application.

Comment: 327 IAC 16-9-2 (b) Simply further describes methods to meet the performance standard. At best, delete this section. At least, move it to the guidance document. (IBCA)

Response: This section has been modified; additional information will be contained in guidance.

Comment: In 327 IAC 16-9-3, as an incentive to treat wastes, IDEM should consider waiving some of the recordkeeping requirements for manure distribution if the manure is properly composted at the confined feeding facility or if the dried manure meets all criteria for distribution of municipal biosolids. (HEC)

Response: Compliance with biosolid requirements in 327 IAC 6.1 is more restrictive than the draft confined feeding operation provisions. The recordkeeping requirements are not intended to be burdensome and can provide protection to the farmer if a problem exists and the farmer can produce

records showing appropriate application.

Comment: 327 IAC 16-9-3 on marketing and distribution creates additional paperwork for CFOs with little or no function with respect to performance outcomes on water quality. (IPPA) (RIF) It should not be the responsibility of the owner/operator to be an agronomic advisor to farmers utilizing his manure as a fertilizer for their crops. He should only be required to provide the individual that receives or purchased more than 10 cubic yards or 2000 gallons of manure an information sheet containing items 1, 2, and 4, and a reasonable estimate of nitrogen in manure based on required testing for the manure management plan. (RY) The marketing and distribution requirements are unnecessary. (JPM) Safe manure marketing and distribution, such as dried and bagged, composting, should be encouraged and not regulated to extinction. (RRSO2)

Response: The records for marketing and distribution will provide evidence that the manure was not improperly dumped. It can also indicate who applied the manure if a problem exists with manure that the farmer sold or gave away.

Comment: The following ~~Arule@~~ needs to be clarified or revised: 327 IAC 16-9-3(b)(2&3) Marketing and distribute manure: this requires CFO to ~~Apolice@~~ users use. (BL) 327 IAC 16-9-3(b)(3) Delete this section since the seller would not necessarily know on what crop the manure is to be applied and even in the event that the seller knew wouldn't mean he/she would have the expertise to recommend an application rate. (IBCA)

Response: The requirements have been clarified to include the farm generating the manure, a statement regarding it is an unlawful act to allow the manure to enter any waters of the state, information on the nutrient content, and manure application requirements to be provided by the owner or operator.

Comment: In 327 IAC 16-9-3(c) it is unnecessary and burdensome for an operator to maintain records of this type and to this detail when there is no process developed to make use of this information in a beneficial manner. (KGR) This is creating additional paper work for the producer. (DTS)

Response: IDEM believes without documentation of the information about the management of the manure it could be perceived by other entities and the general public that the manure is being ~~disposed@~~ as opposed to being used as a beneficial re-use.

Comment: 327 IAC 16-9-4 does not allow for alternative measures. (RIF) Why does solid manure have to be covered after 30 days if run-off is properly controlled? (RY)

Response: This has been changed to require manure stored for more than 72 hours to be covered or otherwise protected and to be applied to a site within 30 days.

Comment: 327 IAC 16-9-4 We believe most of the measures in this section have merit and should be applied to new structures. However, we believe an existing system that has been in place and working with no violation should be allowed to continue to operate as it has in the past. (APE)

Response: The revised rule does not require those existing systems without violations to retrofit their systems.

Comment: 327 IAC 16-9-4 (a) through (c) These three are redundant to that they have all been covered in other areas of the rule. These are simply management practices to meet the performance standard. (h) This section could be explained with a chart similarly used for setback distances. Ninety-six (96) hours would be a much more practical time period than twenty-four (24) hours. (i) It would be more practical to delete this section and just allow section (2) to stand as the provision to deal with staging of manure over 96 hours. (k) this provision would bring livestock production to its knees. Constant supervision implies that an operator cannot meet the performance standard unless they sit and watch their equipment work. Allow the manager to take the necessary steps to meet the performance standard. (IBCA)

Response: Staging requirements have been moved to 327 IAC 16-10-3 and redundancies have been eliminated.

Comment: Section 4b2 does not allow CFOs to operate outside of any of your approval conditions. (MSMO)

Response: The rule does allow for alternate design, compliance approach, or innovative technology that provides equivalent environmental and human health protection and meets the performance standards in 327 IAC 16-3-1.

Comment: In 327 IAC 16-9-4(d)(1,2), the term *Must* should be changed to *Should*. (KGR)

Response: This section has been revised and is now contained within 327 IAC 16-9-1 *Must* is a requirement and has been retained.

Comment: D. What is definition of clearly identified markers? (MSMO)

Response: Although the common ordinary meaning of the term applies, guidance will clarify it.

Comment: In 327 IAC 16-9-4(e), earthen berms should be maintained free of trees and holes. (HEC)

Response: Earthen berm maintenance will be addressed in guidance.

Comment: 327 IAC 16-9-4(f) has excessive detail that is unnecessary. (IPPA) In 327 IAC 16-9-4(f), the vegetative management system is the ultimate in detail micro-management. (DTS)

Response: Specification is included in the draft rule so that it is not necessary to permit vegetative management systems.

Comment: f. IDEM is micromanaging. (MSMO)

Response: IDEM has attempted to revise the rule to reflect the needs and concerns of the industry, the general public, to provide environmental protection and to protect the waters of the State of Indiana.

Comment: f5 need to add while being used as a vegetative management system. (MSMO)

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Response: This provision was moved to 327 IAC 16-10-3(b). The word ~~impermeable~~ has been removed. Further information about acceptable barriers will be provided in guidance.

Comment: 327 IAC 16-9-4(k) is not reasonable or necessary. Current technology allows for safety shut-offs in the event of pressure drops, no movement in application equipment, etc. (MY)

Response: The revised rule allows for the use of devices to detect pressure loss due to leaks and devices to shut down the system or under the constant supervision of a designated person.

Comment: In 327 IAC 16-9-4, replace (k) with the following: ~~A~~(k) Spray irrigation is prohibited (NCE)

Response: IDEM does not believe a prohibition of spray irrigation activities is necessary.

Comment: In 327 IAC 16-9-5, will there be any agency inspections? (WR)

Response: IDEM will continue to conduct inspections of confined feeding operations.

Comment: 327 IAC 16-9-5 There is not justification for mandating that this be done. Requiring that a record of this be kept and made available is a totally unnecessary burden. Self monitoring should only be in the guidelines. (APE)

Response: Copies of self monitoring reports for the past 3 years remains in the rule. IDEM believes these will be beneficial in the event of transfer of ownership.

Comment: In 327 IAC 16-9-5, IDEM should specify that self-monitoring is to be reported on standardized forms that IDEM provides. Please specify that the operator is to inspect manure storage structures for leaks and freeboard, as well as the presence of trees, erosion or rodent damage on the berm of earthen structures, cracks or wet spots in concrete, etc. It should also specify that berms must be kept mowed so that leaks will be detectable. (HEC)

Response: Details relating to self-monitoring recordkeeping will be addressed in guidance.

Comment: Self-monitoring is unnecessary. This should be guidance. (IPPA) (SHDL) Do not approve of keeping a written record of your visual management inspections of your manure storage. (APA) (ERE) Keeping records of my visual inspections is burdensome. It is not right that you can fine me for lack of paperwork. (RRE) Self-monitoring should be designated as guidance. (KGR) (RY) The self-monitoring section is not appropriate for regulation. How would it be enforced? (MY) This is micro-management. (DTS) I don't agree with self-monitoring. (LD) The ~~self-monitoring~~ rule and related rule requiring records to evidence such self-monitoring should be eliminated. (RES) Self-monitoring should be guidance only. (CWS)

Response: Self-monitoring will provide effective prevention of problems that could lead to a water quality problem. Self monitoring was proposed for a variety of reasons. With limited IDEM inspection staff, self monitoring assures a level of oversight of confined feed operations. A number of situations have arisen in which the site managers have demonstrated a lack of site knowledge or monitoring. Self

monitoring provides a level of protection for an operation which has experienced a pipe breakage or other unanticipated emergency from reflecting on the normal site management.

Comment: I feel a statement to the effect that owner/operator shall inspect all manure management systems for compliance with this article and approval condition; shall correct any deterioration or malfunction of any parts of the manure management system or any other problems to comply with the confined feeding operation approval and these rules and to ensure that water quality (not environmental or health hazard) is not adversely affected; and where a hazard is imminent or has already occurred, the emergency spill response plan must be implemented immediately should be sufficient in the rules. (RY)

Response: IDEM concurs.

Comment: Manure equipment should not need to be inspected twice a month. We only use them one or two times a year. (DLO)

Response: IDEM has removed this requirement.

Comment: The following rule needs to be clarified or revised: 327 IAC 16-9-5(b) Self monitoring: judgement call subjecting CFO to harassment by again using threaten to cause threat to human health instead of water quality. (BL)

Response: This provision has been deleted. Self-monitoring requirements are now found in 327 IAC 16-9-1(e).

Comment: 327 IAC 16-9-5(c) If the owner/operator is to ensure that the performance standard is not breached, then allow the owner/operator to determine how to manage the system's equipment. (IBCA)

Response: Manure handling equipment inspections have been deleted.

Comment: 327 IAC 16-9-6; Emergency spill response is probably a good idea. However, there is not enough educational material available for a person to know exactly what the best solution to a problem would be. (SMC)

Response: IDEM will provide further information and an example in the guidance document.

Comment: Is a two gallon spill of liquid hog manure such an environmental threat that an emergency spill response plan should be implemented? This should be changed to read implement the emergency spill response plan when a spill is an environmental threat. (CF)

Response: The spill rule references quantity, type, and duration of objectionable substances such as to impaired water quality. This is a subjective decision by those in control at the spill site.

Comment: In 327 IAC 16-9-6, the emergency spill response plan should include sinkhole drainage information (i.e. dye tracing) if sinkholes are present on the CFO site. InDOT currently does this for their emergency spill response plan on new construction in karst areas. (IKC)

Response: Emergency spill response plans will be site-specific. The current proposal does include a list of known discharge points (springs, seeps, et cetera) surrounding the property/manure management unit

Comment: 327 IAC 16-9-6 should specify that an emergency spill response plan should be implemented any time a quantity of manure greater than 5 gallons of liquid manure or contaminated runoff enters or threatens to enter waters of the state. (HEC)

Response: IDEM believes the current spill rule language should not be contradicted by more stringent requirements in other program rules.

Comment: 327 IAC 16-9-6 I applaud the insertion of emergency spill response plan requirements. (BE) The provision for an emergency spill response plan is a good one. (IPPA) (RRSO1) The emergency response plans and covering options make sense. (RRSO2)

Response: IDEM concurs.

Comment: Any spill response action should be reported to IDEM within 24 hours. The release response plan and record of actual spill response events should be available to the public upon request for the costs of copying. (HEC)

Response: Spills must be handled in compliance with the spill reporting rule at 327 IAC 2-6.1. If IDEM responds to the spill, documents relating to the spill are public information.

Comment: We believe that thorough scrutiny of surface and ground water quality near CFGs is in order. We must stress that both ground water monitoring wells and surface water sampling is necessary (STV) Large operations represent a significantly greater risk to the environment and public health as recognized by the EPA/USDA in their Draft Unified National Strategy for Animal Feeding Operations (September 11, 1998). In light of this, we believe that for larger operations monitoring wells and surface water monitoring should be required to determine how much contamination is getting into the waters of the state. (STV)

Response: IDEM has ground water and surface water sampling projects in progress. If evidence is found that confined feeding operations are causing problems, monitoring wells can be required.

Recordkeeping

Comment: The recordkeeping requirements are burdensome. (RDS) (BEL) (SMM) (JRS) (RCL) (MS) (DMOS) (KAK) (DSCH) (RCL) (SCA) (SCM) (IFB) (LA) (WHA) (CJ) (TS) (PW) (RP) (RHW) (BW) (GJ) (BILF) (ANON1) (CR) (MB) (M&E) (DD) (PV) (BH) (LOL) (RT) (JLA) (BJR) (RBO) (LB) (LP) (DR) (GSC) (BWA) (DGR) (WVM) (HW) (DJN) (SKH) (DL) (MEN) (HMC) (OK) (MGS) (WCV) (DCPP) (DSCH) (JK) (BS) (DTH) (HST) (HSM) (HSP) (HSRT) (HSB) (HSI) (HSCY) (AM) (NN) (WT) (NESS1) (LK) (KA) (BO) (BT) (BSF) (RML) (RMM) (MWC) (CW) (GDS) (RJG) (NK) (DHB) (KWI) (ERE) (DGF) (DCF) (EG) (ANON5) (GBU) (RIF) (RRE) (MBR) (BJRO2) (KMB) (DSCHN) (MCSW) (TMF) (DCPP1) (JTK) (SHB) (DCPP2) (DDD) (JWM) (JTI) (JT) (SM) (RV) (MLS) (MLE) (RV) The recordkeeping requirements are a good move although it will be a burden and expense for most producers. (BE)

Response: IDEM believes the recordkeeping requirements foster improved nutrient management on the farm and will not consume excessive time to generate and utilize.

Comment: I am appalled at the level of paperwork that would be required, both be the producer and at the IDEM office. While that generates income for IDEM and IDEM staff, it does nothing to improve the environment. This document should not be adopted without a ceiling on IDEM's financial and personnel budget. (JST) (VAA) I do not approve of the need to keep maintenance records on all the equipment during the winter and summer when we do not use it. What happens if I forget to write something down, will I be fined or my employer be fined for my mistake? (JWM) (JTI) (MAB) (KHA) (JLSM) (JES) Smaller farms can't spend the time that you want for all the record keeping and do the actual workings involved with the farm operation, because they don't have extra people around like the larger farms. (GSN) I am a small producer with less than 100 sows. The recordkeeping you are proposing alone is enough to put me out of business. (AJK) The amount of reports, time spent in filing reports, and time spent with state inspectors is a burden we don't need and an expense we cannot afford. (RM)

Response: The draft rule requires that certain documents be generated and maintained by the producer. These documents are to be kept as part of the facility records. IDEM believes that these documents will assist the producer in making good management decisions and to assist in their defense of activities that may come under the scrutiny of IDEM. One of the records will actually help farmers to reduce fertilizer costs and maximize the benefit they obtain from manure application while minimizing the loss of nutrients to leaching. Another document will assist by providing the producer and their employees with an emergency spill response plan allowing quick action in the event of a spill and minimizing potential environmental impact.

Comment: There should be no recordkeeping requirements. (BJR) (WT) (RH) (DJ) (KWH) (APA) (HTSG) The paperwork should be encouraged but not required. (JH) (MWG) (IPPA) (CWS) (KKA) (DTS) Producers should not be required to keep manure application records on ground that they own or manage. (GB) Small operations should not have to keep all of the records demanded of large corporations. (GG) I am opposed to more rules that require me to fill out more forms and keep more records. (AD) I am opposed to recordkeeping and sending manure and soil out for testing. (DRB) We are loaded with enough recordkeeping. (GD) Recordkeeping requirements are unnecessary. (FG) (WOF) (JT) (SM) (RV) (MLS) (MLE)

Response: Information assists in making good nutrient management decisions. IDEM believes these tools will assist in protecting the environment.

Comment: Keeping records for life is unreasonable. (HLS) (MW) (RME) (BDB) (TF) (DLSG) (LD) (KEL) (MRE) (BILF) (BR) (CRE) (DB) (MG) (JJT) (SMO) (FJ) (DGRE) (KBB) (KLK) (CAD) (CKO) (EML1) (SK) (L&SP) (DS) (JLB) (AB) (JD) (EP) (CB) (BUF) (LUL) (JY) (JLW) (RTL2) (DGFA) (CW) (RSP) (DLW) (BHO) (RHO) (MR) (DBR) (BLA) (KRO) (ERE) (FCS) (HF) (DHO) (MK) (MLR) (SF) (RSCH) (DLOW) (JN) (SHI) (CLE) (RRE) (BJRO1) (ABT2) (SRF) (ELW) (MSMO) (JGS) (KGR) (JOY) (NG) (TV) (JLEM) (GLM) (GSD) (CVF1) (LLP1) (DKI) (MHF) (BGU) (DTS) (NCB) (DLK) (KHA) (SR) (JDH) (JHO) (MMO) (WJ) (GCA) (GSFP) (ADP) (APE) (JES) (DCPP) (LF) (WB) (DCPP1) (JC) (OE) (JKU) (BAI) (RD) (JTK) (DWD) (DCPP2) (AP) (WSJ) (TI) (DPO) The useful life of the production records that guide our business decisions are only 4 to 7

years; any more than that just takes up space. (NESS2) Records should not be kept for more than 7 years. (FCS) Records should not be kept for more than 5 years. (AML) (IFB) (LN) A time period of 5 to 7 years seems more reasonable. (BLA) Records should not need to be kept more than 3 to 5 years. (TB) (RY) (WSJ) (TI) (DPO) Records should not need to be kept more than 2 to 5 years. (CVF1) Records should not need to be kept more than 2 to 5 years. (RFE) (RJG) (MDK) (BRS) The useful life of the production records is 2-3 years. (BF) (DZ) (HG) (CW) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (JGS) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (GLM) (TRE) (JJB2) (PMO) (CAD) (RRE) (TWF) (MK) (BAW) (DBA) (WLH) (WLB) (RB) (JL) (PS) (ELW) (JOY) (TV) (BGU) (SR) (JDH) (JHO) (MMO) (WJ) (GCA) (GSFP) (ADP) (APE) (JES) (LF) (WB) (DCPP1) (JC) (OE) (JKU) (BAI) (RD) (JTK) (DWD) (DCPP2) (RV) Manure applications records need to be kept for 3 years. (RA) (RES) (DHF) (CWS) (RBF) (LT) (DPS) (GF) (GFJG) (LLP1) (GFSG) (EML2) (LK) (KA) (LMG) (KGR) (DKI) (RY) Records should only be kept for 2 years. (KK) (MSMO) Manure application records should only be kept for one year. (MWL) (RRSO1) (RRSO2) (RRSO3) Spill response records should be required for only a length of time that helps IDEM track down sources of contamination or contaminated water. (DCPP1) (JTK) (DCPP2) A more reasonable time frame would be until you retest your soil and manure. (LH) Only the minimum records need to be documented and three years would be adequate for retention except for construction diagrams. (NCB) (DLK) (KHA) The application records are only applicable for the life of the manure on cropland; anything else is useless. (NSCH) (ANON6) (RTE) (JLB) (EJN) (HG) (AGRI) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (NESS2) (WW) (RJMC) (DSL) (CAD) (PCG) (BVF) (RC) (DWA) I have no problem maintaining field records for a finite time frame to be used only if necessary when a definitive problem occurs and backup information is needed. Any type of regular reporting beyond that is not a good use of your time or mine. (AO) Recordkeeping is good to the point that it requires the producer to routinely figure their manure fertility levels. Records should not be accessible to the public. (GS) Please reconsider the length of time to keep records and what records you want us to keep. (EG)

Response: IDEM concurs that some of the records do not need to be kept for the life of the facility and has changed it to 5 years for information about manure and soil, information about manure application activities, and documentation of any spill response implemented by confined feeding operation personnel. Record keeping provides both the farmer and IDEM with information on an operation's history that demonstrates both responsible practices when a good operator has an unfortunate spill, as well as poor practices at an improperly run operation. It also provides a tool that allows a farmer to track application rates at each field, thereby maximizing the agronomic benefit provided by manure spreading. Centralized record keeping may be an option in the rules as finally adopted, or as part of our compliance policy. Soil tests, although an important part in managing any fields receiving manure, would not, for instance, address the causes of a discharge. We will not be providing the record keeping books; however, Purdue University is proposing a cooperative extension document for record keeping. Any compliance actions for out-of-date record keeping would be made on a case-to-case basis.

Comment: Most of the proposed new regulations play right into the hands of the factory farm concept, because only at that volume can records be kept in the detail suggested in current proposals. (DG)

Response: Record keeping provides both the farmer and IDEM with information on an operation's history that demonstrates both responsible practices when a good operator has an unfortunate spill, as

well as poor practices at an improperly run operation. It also provides a tool that allows a farmer to track application rates at each field, thereby maximizing the agronomic benefit provided by manure spreading. IDEM does not believe that the recordkeeping requirements are burdensome.

Comment: If the operation is sold to a new owner, what records shall he need to maintain? (RY)

Response: Records of field nutrient applications are necessary to adjust fertilization for the crops.

Comment: There is no benefit to imposing increased file reporting whenever a change occurs in the land that is used for manure application (i.e. ownership change, term changes, new acreage, loss of previous acreage). (MWL)

Response: That type of information will be transferred to IDEM only during the renewal period. Otherwise it will be maintained on the farm.

Comment: In the manure management field, the samples that have to be taken and sent off take up to two weeks or longer to get back the result. I can't wait this long for test results and also have to deal with the changing weather. (RBO)

Response: Adjustments in sampling collection will be necessary.

Comment: In 327 IAC 16-8-9, all operating records should be available to the public upon request for the costs of copying. (HEC)

Response: IDEM cannot keep all operating records and does not believe there would be value in doing so. The files that are kept at IDEM are available to the public for the cost of copying.

Comment: Recordkeeping for manure application would not even be needed if N-P-K levels are monitored on soil tests. If a producer is applying manure at close to an agronomic rate, then the soil test would reveal if the manure is being applied at too high of a rate. I contend that IDEM would get all the necessary information from these soil tests, thereby eliminating the need for excessive paperwork from us. (DF)

Response: The manure test and soil tests help determine the proper application rate. Adjustments to application rates are made based on levels in the manure so that overapplication does not occur.

Comment: What sort of public notification (or recordkeeping, monitoring, or engineering, etc.) is required when someone wants to build a house and put in a septic system? These systems have potential to impact water quality. Why are there not more stringent regulations on them? Is it because developers, builders and those wanting the county's life would become angered and begin protesting loudly? (PV) I'm wondering about the concentration levels that can occur from septic systems and why aren't they as heavily regulated as you propose us to be? (KD)

Response: Septic systems are regulated by the county health departments, not IDEM. House construction is regulated through building permits and local zoning.

Comment: We do not like the idea of having to document everything we do whenever we haul some manure. (DHF)

Response: Information is a key to decision making and without the information to consider, proper nutrient management decisions are hard to make. A minimum level of documentation is necessary in order to demonstrate manure is used for its nutrient content.

Comment: Having records that indicate that my manure application equipment has regular inspections or equipment repair and keeping them is about as responsible as reporting a tire change to the BMV. (BILF)

Response: Recordkeeping on self-monitoring can be kept as a simple log. This information not only indicates that the producer is monitoring the confined feeding operation, but records showing proper operation and maintenance can provide protection the farmer if a water quality problem exists.

Comment: There is a problem with the records, annual fees, and the fact that some producers in karst topography may not be able to meet the requirements of the rule. (FC)

Response: There are no annual fees in the draft rule. IDEM feels a minimal level of documentation is necessary in order to demonstrate manure is used for nutrient content. Variances are allowed for sites in karst topography if they can be shown to be environmentally protective.

Comment: I am concerned about the tremendous amount of record keeping that would be required. It is my understanding that to fail to keep these records current would constitute a violation. (KW) I am bothered by your ability to cite me for a violation on recordkeeping. (FCS) I believe that the record keeping that is described in the suggested rules will make it very difficult to maintain. With any small complaint, a farmer could be put out of business just because he does not have proper documentation of his manure application. (UF) (KHA)

Response: Though failure to maintain certain records would be a violation of the rules, it is not IDEM policy to send administrative violations into enforcement action.

Comment: Manure management plans should only be required to be kept by an operator as long as information is needed to determine manure application rates. (DCPP)

Response: Only the current manure management plan needs to be kept. The manure management plan is updated every 5 years.

Comment: Spill response records should be required for only a length that helps IDEM track down sources of contamination of contaminated water. Office of Indiana State Chemist only requires Restricted use pesticide application records to be maintained for two years. (DCPP)

Response: IDEM has changed the time period for keeping spill response records from life to 5 years.

Comment: We need standardized recordkeeping to help with the required, time consuming logging of information. Isn't soil testing a more accurate solution? Soil tests don't lie. Records can be manipulated

for different purposes. (KMV)

Response: Standardized recordkeeping forms will be available in guidance. Soil tests are not accurate for nitrogen levels and recordkeeping is required to calculate agronomic rates.

Comment: 327 IAC 16-9-7(a)(6) If self-monitoring is required to be part of the operating records, then is it self-monitoring? We would recommend moving this provision to guidance. (IBCA) (APE)

Response: Self-monitoring is required to be in the operating record which is kept on the farm. Guidance for how to conduct this will be in guidance.

Comment: 327 IAC 16-9-7(c) Since IDEM inspectors are not calling ahead to schedule site inspections, records cannot be required to be provided during the inspection. The word "provided" should be replaced with "made available upon request." If this is the case, records can be required only if the inspector schedules the visit. (IBCA) (APE)

Response: Records are required to be kept at the site and made available to representatives of the department.

Comment: 327 IAC 16-9-7(d) There is no rationale for this provision. Establish a time table for these records, but an operation in place for multiple generation should not be required to keep dated and invaluable material. (IBCA) (APE) The following rule needs to be clarified or revised: 327 IAC 16-9-7(d)(1)(2) Record requirements: why forever? with regular soil tests (BL)

Response: The current rule language specifies that certain records need to be kept indefinitely and others for 3 to 5 years depending on the document.

Comment: In 327 IAC 16-9-7, will there be any agency review? (WR)

Response: IDEM will review records that are required to be kept at the confined feeding operation.

Comment: In 327 IAC 16-9-7, add:

(e) Operating records from industrial confined feeding operations shall be maintained at the department

(f) Operating records from industrial confined feeding operations shall be made available to the public upon request.

(NCE)

Response: IDEM is comfortable with the current provisions. IDEM does not believe there is a need to define or regulate an industrial confined feeding operation any differently than confined feeding operations as defined in 327 IAC 16-2-5.

Comment: In 327 IAC 16-9-7(d), is three years long enough for reports? (WR)

Response: IDEM believes 3 years is sufficient for keeping records of completed self-monitoring reports and records of any other person receiving quantities of more than 10 cubic yards or 2,000 gallons of manure.

Manure Application

Comment: I disagree with the requirements concerning application of manure on the ground. (CCO) Do not approve of not surface applying manure. (APA)

Response: Surface application is still an accepted method of application. However, site use restrictions do reflect that surface application activities are of greater concern than injection or incorporation.

Comment: Land application restrictions - setbacks, slope, cover, etc. - would put a real hardship on my operation. (FK) If I am to comply with the manure application setbacks in the draft rules, then I will no longer be able to spread or inject manure on much of my land because of the small size, rolling hills, and creek bottom fields. (ABT1) If we can't spread manure in southern Indiana, half of the state is of no value. (RP) We must be able to keep the practice of surface applying solid manure. (JDS)

Response: Setbacks have been revised and differ based on application type. Surface application in an environmentally responsible manner is allowed.

Comment: To justify the setback distances proposed and the features used for distances, a severe water quality problem must be identified. This clearly is not the case. With so much land "out of bounds" for manure application, IDEM is chopping up fields and unjustifiable tinkering with producers' operations. Producers are expected to apply organic (manure) fertilizer in one strip or section, then come back to the field with inorganic (commercial) fertilizer in order to achieve adequate nutrients for crop production. Is there any data to show that setbacks with shorter distances than these have resulted in contaminated waters? Producers cannot pollute, but must meet the performance standard or pay the fines. (IBCA) (JS) (LF) (DCPP1) (MLB) (CAB) (PJH) (GSN) (LM) (DCPP2)

Response: This rule does not regulate inorganic or organic fertilizer application. However, application of any type of fertilizer that enters waters of the state is a violation. A flexibility clause for lesser setbacks is contained within the rule.

Comment: Manure is a natural by product and needs to be incorporated into the soil. (JRS) If I must incorporate the manure, the value of no-till farming will not be realized. (DJL) To require incorporation of nutrients on HEL soils would result in greater soil erosion and greater movement of sediment and nutrients into waters. We must be allowed to keep residue levels on the soil. (BM) Requiring incorporation increases the potential for soil erosion. (JPM)

Response: The setback provisions have been modified and residue cover is recognized as reducing runoff potential. Setbacks are greater for surface applied manure without incorporation. The setbacks compensate for surface application without incorporation.

Comment: IDEM philosophy that organic, biodegradable, natural fertilizer is a greater harm to the environment than inorganic, manufactured fertilizer is misguided, clearly wrong and in need of change.

(IPPA)

Response: There is a greater potential for runoff from manure because of the volume of manure generated. Commercial fertilizer is regulated by the State Chemist unless there is a discharge to waters of the state.

Comment: Manure application subjects should be in the guidance document rather than the rule. (IPPA) Management of the application process should be left to the producer and his fertility personnel. (RRSO1) You suggest strict rules for distributing manure on farmland. (HMO)

Response: Many problems have been observed due to poor land application practices. These restrictions will reduce potential negative input into the watershed.

Comment: If my machinery and equipment are kept in good working order, there is no reason to watchdog the management of my manure disposal procedures. I have neither the desire nor the money to hire someone to watch me spread manure. As far as restrictions on the size of an area where I can spread manure, if my drainage system is up to standard, and I am on my own property, how I organically fertilize my fields should be entirely up to me. (JLW)

Response: Over-application is a common cause of water quality violation from confined feeding operations. Site use restrictions should increase confidence that land application is a viable option. Allowances have been made for alternative compliance options.

Comment: Why does the section on manure application requirements come after the section on recordkeeping? These should be switched. (HEC)

Response: IDEM will continue to review the rule for clarity and format.

Comment: Many non-livestock producing homeowners buy and apply composted manure as a fertilizer for their gardens, flowerbeds, etc. Shouldn't they be under the identical regulations that livestock producers would have to comply with pertaining to where and how this fertilizer can be applied? If not, this would be a major case of discrimination against the farmer. (RCL)

Response: The requirements under manure marketing and distribution are established in order to notify others of their responsibilities.

Comment: Organic fertilizer is sold in bags at the local discount department stores to anyone who wants it. Are the department stores keeping records of each individual who purchases it, how many bags they buy, and where they use it? A requirement to provide an information sheet to everyone who wants to put organic manure from my farm on his garden is absolutely ludicrous. (JLW) Requiring the producer to be liable for the distribution of his manure as organic fertilizer is ridiculous. (MSB)

Response: There is a de minimus amount of material which may be distributed without records.

Comment: Why require CFO operators to provide those that utilize manure from the facility a maximum rate? The CFO operator should provide a reasonable estimate of plant available nitrogen present in the

manure based upon testing done for the manure management plan.

Response: IDEM concurs. Changes have been made.

Comment: It is ridiculous that I should provide an information sheet to my neighbor when he uses my manure to fertilize his crops. (NSCH) (ANON6) (BS) (RME) (DTH) (HST) (HSM) (HSP) (HSRT) (HSB) (HSI) (HSCY) (PCG) (DBA) (BVF) (LA) (RTE) (SCA) (SCM) (LT) (EJN) (AGRI) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (NESS2) (WW) (RJMC) (DSL) (DSCH) (ELW) (JGS) (JOY) (NG) (BGU) If someone uses my manure, it should be his responsibility to get it tested for nutrients and he should apply it accordingly as we do. (GF) (KLK) The proposed requirement that owner/operators provide information sheets to parties taking manure from the operation to fertilize crops, and that records be maintained for such manure transfers, should be removed. (RES) The requirement for disclosures and notifications to persons who may wish to use manure for their personal use should be deleted. (GB) If my neighbors chose to use some of my manure they should be able to without all of your strings attached. (MG) If the paperwork becomes a nuisance, other family members and close neighbors may not be as receptive to receive my fertilizer and I would have to wait until my fields dried out, even though this may require me to haul manure while I should be doing other fieldwork during the busiest times. (BAW)

Response: The information sheet is designed to educate the end user on the nutrient content. This information is necessary for the end user to use the manure for its nutrient content.

Comment: The requirement to give anyone that received manure an information sheet would create additional paperwork and would have little benefit. I should be able to spread manure on a neighbor's land who desires to utilize the benefits of the manure with the same requirements as spreading on my own land. (CWS)

Response: IDEM concurs that if this farmer is performing the application the information is not necessary.

Comment: Isn't there another state, already dedicated to solving the problem, who Indiana can follow as an example to correct this horrid situation? Can materials from these pits continue to be sprayed near roadways and where the land slopes down to a creek or stream without affecting the environment? (BLC)

Response: The rule is designed to address these problems.

Comment: What ever happened to scientific based decisions and regulations? You did your survey of large livestock operations this year and found that farms have not threatened water supplies. Yet you want to implement far too stringent regulations and there are not any problems. You said that only 2 percent of the operations had environmental problems, but they didn't constitute any imminent threat to the waters of our State. Therefore, the setback rules and guidelines are unacceptable and provide no environmental benefit. (HLS) (MW) (CRE)

Response: IDEM's study showed 2% of facilities had significant point source violations. Approximately

20% have problems which threaten water quality with a point source discharge. Agriculture is the leading source of nutrients in waters which were not evaluated in the above referenced survey. For these reasons, regulation is necessary.

Comment: If you dictate these stringent rules and I go out of business as well as others, your job will be in jeopardy in the near future. No livestock, no manure, no monitoring, and no job for IDEM! (HLS) (MW)

Response: IDEM's job is to protect the environment of Indiana. If at some point there are no threats to the environment, then IDEM will have done its job successfully.

Setbacks for Manure Application

Comment: Commentors that are concerned about or object to manure application setbacks. (NSCH) (ANON6) (BF) (BRS) (PCG) (RTE) (EJN) (AGRI) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (NESS2) (WW) (RJMC) (DSL) (DBA) (WLH) (WLB) (RSP) (ERE) (RRE) (KS) (JGS) (RCU) (BGU) (RD) (BL) (NN) (BR) (SCA) (SCM) (DMOS) (CAD) (GDS) (MWG) (GF) (KKA) (CKO) (DGF) (WSF) (RRSO2) (RRSO4) (JELS2) (DJ) (DLW) (DWA) (PTCF) (EG) (JLB) (IFB) (DR) (GSC) (CMO) (CWS) (BJR) (PMO) (VS) (MY) (DJL) (MCSW) (RC) (JLS) (RJ) (LK) (KA) (MYA) (RHO) (RFE) (FCS) (MK) (EG) (DLOW) (JN) (KGR) AW-1 setbacks shouldn't be increased without demonstrated problems with current recommendations. (FJ) The setbacks are too large for 5 and 10 acre fields. (WVM) In 327 IAC 16-10-3(9) it looks like IDEM is trying to regulate odor. (AP) Setbacks from roads and manure spreading are odor issues. (RSTE) I agree that setbacks are needed, but they should be only used when a threat is possible, not everywhere automatically. (KAK) The rule is too strict. It should be no setback if no runoff to side ditch or roadway. (RBI) Until this can be justified, the setbacks should not be increased from the AW-1 Guidance Document. (ICARD) The setbacks in AW-1 have worked well. (SS) Increased setbacks would require application of costly commercial fertilizer. (RSCH) (KGR) I see nothing in the law that gives IDEM the authority to address setbacks. (RSTE) I believe your setback distances are not based on fact, only emotion, and have been set arbitrarily. Where and what is your scientific data? (NG) I am confused to the specific reason for increasing setback distances to this extent. I feel IDEM should clearly define a water quality explanation for these setback distances for manure application. (RY) Why should manure have larger setbacks from fences, roads, tiles, WASCOD and streams than inorganic fertilizer? (MHF) Setbacks must be reasonable and comparable to the application of other fertilizers and pesticides. (AO) I feel that redefining boundary limits is totally unnecessary. These have been adequately negotiated with, and established by IDEM, with whom we have worked cooperatively for many years. (AB) I see no reason for much setback distance. If you are regulating manure application by soil test and manure test, why have a setback? (KYL) Adherence to the manure application setbacks will result in large areas of many fields being unavailable for manure application. This will certainly result in over application of manure on available land. (EP) The inconsistency in use of A manure@ versus A fertilizers@ etc. is costly and not justifiable. (TS) (MSM)

Response: Many of the spills investigated by IDEM are related to manure application activities. Manure has a significant negative impact to aquatic life when it enters a water body and establishing setbacks within the rule will assist in reducing the potential of manure entering a water body. Manure also

contains bacteria and other microorganisms that can cause human illness and must be prevented from entering wells and bodies of water used for drinking water purposes. Manure application usually involves handling large quantities of material being applied per acre to achieve adequate fertilization for proposed crops. The large quantities cause increased concern for keeping the material on the site and avoiding runoff to roadside ditches, across property lines, or into streams. The setbacks also allow for the space to handle a spill and preventing it from leaving the site.

Comment: Rule 10, section 3g is too broad and not water related. (MSMO)

Response: This requirement has been modified.

Comment: The use of commercial fertilizers, herbicides and pesticides at closer setbacks than manure must also be questioned. (WCV) (WLB) Why is the setback different for manure than for commercial fertilizer to chemical application by agribusiness? (KRO) Setbacks from the neighbors property and the need for commercial fertilizer is an added expense. I could understand not next to a house or well, but out in the field is just a waste of time and money. (HF) Why should we be required to set back our animal waste application farther than we would set back commercial fertilizer? (MLR) (ABT1) Manure application rules require setbacks where commercial fertilizers can be spread. (CVF1) Some of the manure application setbacks make me wonder why manure can't be applied to those areas, but chemical fertilizers can. Why is more not being done to address and regulate this problem? Why can't manure be applied in floodplains, but herbicides and insecticides can? For that matter, why are floodplains even allowed to be farmed? (PV) Why have a setback of 100 feet when herbicides only require 50 feet? (DBR) Why is it ok for fertilizer applicators or applications to get closer to property lines or tile inlets than manure applications? What's the difference? (BILF) Manure rules are inconsistent with commercial fertilizers. (BR)

Response: The authority for this rule relates to confined feeding activities. Chemical fertilizer, herbicides, and insecticides are regulated by the State Chemist unless it discharges into waters of the state.

Comment: I have a problem with the manure application setback of 300 feet for drainage tile inlets. I have installed these inlets to help manage water runoff and preserve topsoil. If this becomes law, I be forced to discontinue building these beneficial devices because they will limit the amount of land available for manure application. (BAW) I have a problem with the manure application setback of 100 feet for drainage tile inlets. I incorporate my manure into the soil at the time of application, therefore there is little risk of manure run-off. (DJN) (SKH) (LNI) (DL) (MEN) (RHN) I have a problem with the 500 foot setback to an inlet. (LLP1)

Response: The draft rule does allow shut-off valves to be used with a shorter setback through the flexibility provision in 327 IAC 16-4.

Comment: The distances in Table 2 for injection on 2% or less slopes have been reduced. I had been told that 100 feet from waters of the state and 50 feet from public roads and 200 feet from private wells. Is this correct? You now want to reduce these setbacks? I am not understanding why the Indiana Pork Producer Association is upset - you are relaxing the standards with the new rules? Am I correct with my interpretation of Table 2 as compared to what we now operate under? (MP)

Response: Current requirements are guidance.

Comment: I have a real problem with the manure application setback of 100' for drainage tile inlets. I have parallel tile outlets that I installed to help manage the runoff from my fields that can be sealed from taking water when I apply manure. If I stay 100' from those parallel tile outlets, I don't have any surface left to apply manure. (NSCH) (ANON6) (RTE) (DBA) (AGRI) (KS) (JGS) (JOY) I have a real problem with the manure application setback of 100' for drainage tile inlets. I have parallel tile outlets that I installed to help manage the runoff from my fields that can be sealed from taking water when I apply manure. (NESS2) (CKO) (ERE) The 100 inch setback for drainage tile inlets will make nearly all residential homes with septic tanks illegal. (BS) (HST) (HSM) (HSP) (HSRT) (HSB) (HSI) (HSCY) Drainage tile setbacks are a problem. My farm is covered with drainage tiles and there would be no place left to place manure. (RME) We have a problem with the manure application setback of 100 feet for drainage tile inlets. We have parallel tile outlets that were installed to help manage the runoff from fields that can be sealed from taking water when we apply manure. (PCG) I do not understand staying 50 to 100 feet from a tile inlet, when injecting manure, and then spread commercial fertilizer on the surface. (CWS) A 20 foot setback for parallel tile inlets is enough if no runoff. (RBI) The setbacks would make it impossible for us to haul manure from existing buildings, let alone any future buildings. (RRSO3) Why do we leave 10 feet when we inject? (SRF1) The setback restriction for injected manure is too restrictive. (VF) The setbacks you have proposed need a real hard overhaul. The word ~~A~~known@ needs to be inserted. Your definition of WASCOS and drainage ditches need to be defined in better lay terms. (MG) I do not understand IDEM's thinking behind not being able to apply manure within 300 feet of WASCOS or well, but it is allowing fertilizer to be applied in these areas. (TF) (BLA) (CLE) Staying 300 feet from drainage inlets is a problem. Staying 300 feet from a dry dam will lose 50% of the spreadable acreage. (SW) (RHN) Our farm has rolling slopes. A few years ago we built several WASCOS to control erosion. Now we would be penalized and lose the use of several acres to manure application. These outlets could be plugged during application, and also by injecting the manure as we do, there would be no manure entering the tiles. (BRS) In relation to WASCOS, IDEM needs further input in relation to setbacks to determine what this will do to land application in areas with numerous water and settlement control basins. (IPPA) I don't see the sense to further restrict setbacks from WASCOS or wells without any justification. (MWL) We concur with the provisions on setback waivers and reduced setbacks with the use of innovative technology. (IPPA) We question the motive and intent of 327 IAC 16-10-3(g). Setbacks should not address issues other than water quality. This section should be stricken. (IPPA) The proposed rules concerning WASCOS and commercial fertilizer application are inconsistent and discriminate against certain producers in certain areas of the state. (LOI) There is an inconsistency of manure rules versus current use of commercial fertilizers, herbicides and pesticides. (SCA) (SCM) (KBB) Staying 100 feet from standpipes is a problem. We farm 2 fields that are 10 acres each and also have 7 standpipes each. We spend \$2000 extra on our honeywagon to inject the manure so there wouldn't be any runoff. Why stay 50 feet from the neighbors property? Now there's no where to put manure on these 2 fields. (SGP) Most tile inlets can be capped for a period of time so you wouldn't have to stay 500 feet or 50 feet away from them. There is no provision for innovative technology here. (RRE) To protect our water sources, open ditches and drainage inlets have to be avoided, but to mandate a 100 foot rule that keeps me from spreading near the them, limits my manure management plan due to multiple ~~A~~breather@ inlets. In a small field with 2 parallel tile outlets, the 100 foot rule would totally eliminate manure application in that field. (BH) The setbacks for drainage tile inlets needs to be lessened. (SFA) Is there any scientific proof to verify that injected manure will cause ground and surface water pollution if applied within 100 feet of roads, open ditches, and

residence? In my estimation, the 100 foot setback theory is merely to squelch odor problems to non-farming individuals or companies. Perhaps the 100 foot setback rule need only apply in the case of an existing well. (DF) Staying 50 feet away from all wells is not practical. (RRE) Your rules set me up for a violation if I spread manure next to a well that I did not know was there. (ELW) Commentors concerned with property line setbacks. (NSCH) (ANON6) (RTE) (LT) (EJN) (DJN) (SKH) (LNI) (DL) (MEN) (AGRI) (BJR) (SSF) (RBI) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (GJ) (NESS2) (WW) (RJMC) (ICARD) (DSL) (DGR) (WHA) (SMO) (DBA) (MR) (CLE) (KS) (JGS) (JOY) (TV) (GLM) (GSD) (CVF1) (RB) (SK) (BRS) (PCG) (MS) (JLA) (BVF) (NN) (BWA) (WLB) (KLK) (RJ) (JJB2) (RHO) (CES) (AJK) (MK) (SJC) (RRE) (BJRO1) (DKI) (GC) (DHF) (MB) (RBF) (BAW) (KAK) (NG) (RA) (RY) (BG) (LA) (TB) (MDK) (LLP) (JD) (RJG) (CWS) (GF) (RF) (JMU) (BAW) (CVF) (MLW) (BGU) (RW) (CKO) (LLP1) (RES) (BUF) (WLH) (KLK) (EML1) (RRSO3) (DFS) (ELW) (MHF) (DLOW) (JN) (VS) No lagoons within 1000 feet of a county road, our lagoon is 350 feet from the county road, to put it 1000 feet from the county road would put it 650 feet closer to 4 neighbors. (RA) I was told manure had to stay 1000 feet from a road or line fence. Our County Agent told me this was around 100 feet. I hope it is 100 or less or the manure could not be spread from the operation. (LBE) Reconsider setback requirements - 50 feet from roads is excessive. (M&E) Common sense tells a producer to stay away from roads and so forth. (LD) Limiting spreading manure to 500 feet from tiles is excessive. (SMO) If we stay 300 feet from our tile ditches there is no land left to spread manure. (MB) Staying 300 feet from a drainage inlet for irrigation will cut down my spreadable acreage by half. (MLW) As far as staying so many feet away from divide line and ditches, I think it is wrong. (LD) A setback to a field tile would essentially put us out of business. (KK) Our soils are heavily tiled due to the tight clay conditions. Any effort to eliminate these fields from manure application would mean we could not use our manure as a fertilizer product. (KB) Three to five hundred feet from a surface inlet is excessive. (JLA) Under your proposed rules we will not be able to spread manure within 300 feet of any water source or well. However, a homeowner is allowed to have a septic system within 50 feet of a well. This is putting us under tighter regulations than the homeowner. (RD) (MAB) (ER) Some points I do not like in your proposed rules-the 100' distance to be kept from drainage tile inlets. I have consciously watched our system pass close to these and am very aware of what could happen if these are polluted. There is just no way our system within 10' of this is going to run off. (DMO) (SM) (KC) (WB) (SEL) (JES) (SHB)

Response: The setbacks have been modified. IDEM continues to work with all interested parties to create setbacks which are environmentally sound but allow flexibility for the farmer.

Comment: The sinkhole setbacks in 327 IAC 16-10-3(a)-(c) are inappropriate with regard to the point of measurement (i.e., the surface opening or lowest point). This approach assumes that sinkholes only accept water/pollutants if they are open and/or at their lowest points. Sinkholes can and do pass significant water/pollutants without any visible openings and they often feed at multiple places, not just at the center. In addition, it is not uncommon for the radius of the sinkhole to itself exceed the stated setbacks. To be effective, setback measurement must be from the rim of the sinkhole. (IKC)

Response: Setbacks established for sinkholes are consistent with setbacks established for surface waters

Comment: My farm is in a karst topography area and the manure and fertilizer rules should be practical and easily understood for setback and run-off areas. Each sinkhole is located with different variables as

to size, slope, and size of areas running to it and should be treated differently. To verify setback distances it should be proven there is a problem. (EO)

Response: It is IDEM's intention to keep the regulations user friendly and understandable. Application of the materials based on agronomic rates, and keeping manure application away from the direct openings into the aquifers will lessen the likelihood of direct contamination. Location of manure management lagoons/buildings is based on threat to the environment. Sinkholes are surface expressions of locations where water is routed into the aquifer most directly. Sinkholes which do not hold water (those which are tillable) route all liquids into the subsurface at a rate greater than or equal to the receiving rate. Placing a manure management unit over or near such a recharge structure would allow the liquids to enter the aquifer system in the same manner. Even sinkholes which hold water are transient in nature. Often a sinkhole will hold water (for months or years), only to unpredictably drain to dryness (in hours to days). In cases where heavy construction has occurred in karst terrains (e.g. Indiana state road 37), new sinkhole formation is accelerated in those areas which had no prior evidence of karst formation

because of earthmoving and runoff water rerouting. Setbacks and additional design criteria are intended to prevent the need for more expensive remedial construction and cleanup resulting from waiting until a problem is proven before action is taken.

Comment: The approach that one can apply around individual known karst features is of concern. While this may be true in some instances, often there is much unknown under the surface; thus there is potential risk when a structure is constructed in karst terrain or manure is applied in fields. What may seem to be firm bedrock in one spot, may be over a void just a few feet away. (IKC)

Response: IDEM agrees that karst is by nature variable, and difficult to predict the exact location of specific features which occur below the residuum. However your concern for application should be mediated by the requirement that the materials are applied at rates which allow for the nutrients into the residual soils and plant materials before it leaves the arable zone. Manure management units are more constructed, and must have engineering demonstrations which allow for subsidence. Thus protection from application and construction around visible karst features, which form to greater size because they are the preferred pathways into the aquifer, will provide greater protection of larger karst features.

Comment: You're so worried about wells but wells have been grouted for 15 to 20 years with standpipes 18 inches tall (it's the law), there's no way manure can get into them. (WG)

Response: Not all wells are in their original condition and the recharge area for the well needs to be protected.

Comment: Setbacks for wells must include language that states existing and known. (DZ) The issue of known versus unknown wells, drainage tile inlets and public water intake structures is a serious concern for producers. (ICARD)

Response: IDEM concurs and has added known in Table 1 in 327 IAC 16-10-4(a).

Comment: The setback for knifed in manure should not be the same as irrigated or sprayed manure.

(RBO)

Response: IDEM concurs.

Comment: If this is a water rule, odor setbacks should not be an issue. (DPS)

Response: Odor setbacks are not included.

Comment: Your regulations on manure handling have some merit, but set up problems for violations based on some unreasonable setback criteria. (DD)

Response: Setbacks have been modified. IDEM continues to work with all interested parties to create setbacks which are environmentally sound but allow flexibility for the farmer.

Comment: We have acres of ground that we cash rent. It is ridiculous that I should have to have my landlords give me permission to apply fertilizer on their ground. I should be able to inject my manure right up to the property line without a boundary that commercial fertilizer must be spread in. This 50' away from a property line in a field that has no neighbors is unreasonable and has no problem with environmental benefits. (TWF)

Response: A cash rent agreement would meet the requirement for permission. Property boundaries have a variance procedure.

Comment: I hope that IDEM has actual reasons for the setback distances. If there is scientific data that is used I would believe the distances, but if there is no data I would question the distances. (JH)

Response: IDEM believes the modified setbacks to be environmentally sound.

Comment: There are rules in your draft that do not have anything to do with water quality. Example: setbacks from roads and property lines. That has nothing to do with water quality and should be revised (KL)

Response: Setbacks from roads and property lines have a water quality basis in that roads typically have ditches and setbacks from roads and property boundaries create a buffer zone where a spill may be addressed prior to it leaving a site.

Comment: We feel we should be able to spread manure up to our property lines, especially if we knife it in. (JB)

Response: Setbacks have been modified and a waiver can be obtained from neighboring property owners to address property setbacks.

Comment: Setback rules are out of line. Does my neighbor have to notify me of where all their wells or surface drains might be? What about old wells that I may not be aware of because someone has covered up? How about reverse setback rules to protect me? What happens if I have a small field and someone builds a house next to it, I would like to see setback rules so I don't have to change my operation

because someone moved in after I have done everything to comply and have been operating. (KD)

Response: IDEM does not have the authority to establish reverse setbacks. Wells and surface drain information should be available to within 800 feet of the facility.

Slope

Comment: I have a small number of hogs with more than adequate number of acres to apply the manure. One of the proposed rules states that you can't spread manure on floodplains or land with 6% or greater slope without injecting. (SF) Manure cannot be applied to soil of greater than 12%, but this farm is hilly and most of those hills have a good stand of grass because I have applied manure. (JK) I could not spread manure on any of my rough land. (MGS) The slope specifications are unrealistic. (LL) (RTL2) I don't need to be measuring slopes every time I apply manure. (RJ) We agree with not applying manure on slopes of 6%. (DHB) I am against not surface applying nutrients on land with 6% slope or more. (JER) It would be almost impossible to spread manure if restricted by the 2% slope requirements. (BOGU) As for surface applying on greater than 6% slopes, I have better luck chopping corn stalks and surface applying on my rolling ground than knifing it in. If we get a big rain after knifing in manure, it washes gullies by moving dirt and manure downhill. We purchased a Cardy Nitrate meter several years ago to check this and found we can keep manure where we put it by applying it properly on surface residue. The residue and growing crops help control odor. I would like to have a tool to put manure 6 inches under the surface with no erosion or smell, but please don't pass a law before the equipment is available and affordable. (LB)

Response: The slope requirements have been modified to reflect conservation plans.

Comment: Solid manure application should be possible on greater slopes than liquid manure without adversely affecting water quality. (RY)

Response: The requirements have been modified.

Comment: I don't need to be measuring slopes every time I apply manure. Nor does my neighbor have the right to turn me in just because he thinks I am too close to a road or the slope is 3% not 2%. (RR)

Response: IDEM has modified these requirements but the information is available to determine slope.

Comment: Is supplying my neighbor with manure information specs my responsibility? (BW) A farmer that wants our manure applied to his land doesn't need an exact analysis. Less concentration of manure on fields should be what you want. (DHF)

Response: It is required for the farmer to give information on manure content.

Comment: We have been governed for some time as to how close to a neighbor we can build a confinement building, however, a family from town can buy a lot next to our property line and build a new house. (KW)

Response: Local zoning controls land use requirements.

Comment: As far as staying away from PTOs, nobody wants to have manure run into their tile, but here on our heavy clay soils, I could knife manure in within a few feet of a PTO and the manure would never leak into it like it would in sandy soils. To set up a rule for the whole state of Indiana with all different kinds of slopes and soil types is not fair. (SK)

Response: IDEM looks at each site on a case-by-case basis and provides flexibility to the farmer on a site specific basis.

Comment: The following ~~Arule@~~ needs to be clarified or revised: 327 IAC 16-10-2(A)(1) Application restrictions: contaminated runoff? Not runoff (BL) 327 IAC 16-10-2 should qualify ~~contaminated runoff@~~, otherwise it may be determined that rainfall that falls on a field where manure has been applied has to be prevented from moving off site. After manure has been applied, a rain event occurs two days later, are you indicating that if the rainfall is a 2 to 3 inch event the field must be managed to keep al of the water on site? (RY)

Response: A separate rule on performance standards at 327 IAC 16-3 specifies the expected level of protection from manure handling activities. The term ~~runoff@~~ pertains to the manure itself. The rate of application should not exceed the capacity of the soil to absorb the manure.

Comment: The following ~~Arule@~~ needs to be clarified or revised: 327 IAC 16-10-2(A)(2) Ponding. Longer than several days. (BL)

Response: IDEM believes that 24 hours is adequate time for properly applied manure to be absorbed into the ground avoiding runoff from rainfall that may have been predicted.

Comment: Ponding is probably not preventable on surface applied manure because of the ruts in the field. But ponding is not dangerous until it spills into a waterway and so it should not be included. (SMC) Small amounts of ponding will occur on level ground under the best of conditions. In the case o frozen ground, it depends on how deep the ground is frozen. (C&C) Ponding? What about on frozen ground? It can~~t~~ be incorporated on frozen ground. (WVM) ~~APonding@~~ should have a specified time period, such as 24 or 48 hours. (RN1) What is ponding? (MYA) Ponding needs to be defined as an amount. (MSMO)

Response: IDEM has clarified that ponding for more than 24 hours must be prevented (327 IAC 16-3-1(e)(2)(B)).

Comment: The reverse setback should be strongly noted in your Draft Rules for all neighbors to abide by. (BG)

Response: IDEM has no authority over neighbors development. This requirement is applicable if a confined feeding operation or other animal feeding operation choses to expand.

Comment: Your language should be modified regarding my liability on manure applied to my neighbors ground. Once it leaves my place, how can I be held liable for ~~is~~ application? (TB) (MDK)

Response: If the neighbor receives appropriate information about applying manure, then the neighbor could be responsible if a problem occurs.

Comment: In 327 IAC 16-10-2(a)(3)(A), drop ~~A~~open@. How is a sinkhole different from a drainage inlet? (WR)

Response: IDEM concurs and has removed the term ~~A~~open@.

Comment: The following ~~A~~rule@ needs to be clarified or revised: 327 IAC 16-10-2(c)(2) Should be within 24 hours as stated 16-10-3(d) (BL)

Response: Incorporation requirements have been modified to allow 24 hours to incorporate manure into the soil.

Comment: The following ~~A~~rule@ needs to be clarified or revised: 327 IAC 16-10-2(d)(1) Need careful consideration: acts of God (BL)

Response: IDEM enforcement proceedings always consider circumstances resulting in a water quality violation and proceed as warranted.

Comment: In 327 IAC 16-10-2(e), 20 inches may not be much in any area. Perhaps such an area should be excluded unless the bedrock is shale? How will the thickness of soil be demonstrated? What about infiltration? (WR) Why can't manure at an appropriate rate be applied to land that has less than twenty inches of soil above bedrock? (RY) I disagree with the manure management section of no manure being applied to land with less than 20 inches of topsoil above bedrock. (MHF)

Response: Current language limits this to spray irrigation of liquid manure. It is not the intent to include the use of a honey wagon.

Comment: IDEM needs to seek input and testimony from soil geologists to determine if 327 IAC 16-10-2(e) causes any limitation to manure application areas and create a solution if limits are found. (IPPA)

Response: Excessive soil cracking from dryness allows rapid movement of soil. The existence of the rock causes it to move laterally and discharge at outcrops.

Comment: The manure application setbacks in Table 2 need to be clarified that these are known and identifiable at the time of application. (IPPA)

Response: IDEM has included the term ~~A~~known@ in the setback table in 327 IAC 16-10-4(a).

Comment: We question the justification of the numbers used for setbacks. We applaud IDEM for its consideration of injection and incorporation as different from surface application, but question why any setbacks are considered for injection and incorporation methods. (IPPA)

Response: IDEM has reviewed the setbacks and some of them have been reduced.

Comment: The setbacks in 327 IAC 16-10-3 seem to be low and should be measured from the rim of the sinkhole. In 327 IAC 16-10-3(b), drop surficial opening or lowest point and measure from the rim of upper-most closed contour or obvious feeder channel. (WR)

Response: IDEM believes the current limit will suffice since a buffer will exist to trap and assimilate nutrients. Steep slopes also increase the buffer areas.

Comment: 327 IAC 16-10-3(g) proposes a broad realm of authority to IDEM. It allows for future addition of setbacks, specifically pertaining to odor, without input from our industry. This type of rulemaking as we go along cannot be permitted and any additional requirements should be proposed and have opportunity for feedback before becoming a rule. (DPS)

Response: IDEM has had extensive rounds of public input, both at meetings and through formal and informal written comments. By sharing many different drafts with the public, the perception might be that we are doing rulemaking as we go along, however, we have erred on the side of public involvement and are also following all formal steps of the statutory rulemaking process.

Comment: In 327 IAC 16-9-2(c), the language pertaining to percent slope has been removed and effectively replaced with highly erodible land. This new term has not been defined, It must be defined in order to evaluate its applicability. (STV)

Response: IDEM has made this change.

Comment: We believe that the setbacks in Table 1 and Table 2 are not sufficient to prevent the problems associated with sites that contain sinkholes or sensitive geology. Such areas should be specified as being unsuitable for CAFOs. They are also not sufficient to mitigate the problems associated with gaseous emissions and odors. (STV)

Response: Adequate flexibility exists in the rule to address sensitive areas. Odors are not directly being regulated in the rule.

Comment: I have a farrow to finish operation with 300 sows. Are you telling me that now I can't irrigate those fields? Staying 300 feet from a drainage inlet on my rolling hills is to lose 50% of the ground I irrigate. (DW)

Response: A plan can be developed to allow the use of the areas if extra precautions are developed and utilized.

Comment: We live in an area with very tight clay soils that are not very permeable and they lie in an area that may be considered a 100-year floodplain. Incorporating manure within 24 hours in tight clay soils is an impossibility because of the harm it would do to the structure of the soil, and the impossibility of growing a good crop afterward. (KB) Incorporation of all manure within 24 hours needs to be revisited. What about manure spread on hay fields, CRP ground, or frozen ground in Indiana in the winter? (MBR) It is necessary for us to haul manure on frozen ground. Most of the fields have areas that are more than 2% slope. This is an unrealistic rule because of the slope, and winter is a good time to

haul manure because we have the time. (GSD)

Response: The rule recognizes residue or crop cover as adequate to reduce runoff potential.

Comment: As far as not being able to apply on frozen ground, what should a person do when a water runs over and the pit is full? (LD) By not being able to haul on frozen ground - when should we haul? In the spring when there is mud and ruin the ground for 3 years? (PMO) If we couldn't put the waste on the fields through the winter we wouldn't get any crops. (HH) The required stubble ground cover for frozen ground application is almost impossible for a modern dairy farm because corn stalks are chopped for feed, not retained for manure handling. (KMV)

Response: IDEM has included increased storage capacity and operational standards to prevent the need to apply on frozen ground. In the manure application requirements given in rule 10 application of manure is prohibited on frozen ground of over 2% slope or any highly erodible land, unless such ground/land has residue protection or crop cover. Residue protection means the crop residue left on or in a field after harvest, including the straw and chaff expelled by a combine and those parts of the crop left in the ground. Crop cover, or cover crops, are the grasses, legumes or small grains grown between regular grain crop production periods for the purpose of protecting and improving the soil, as described in Purdue University Cooperative Extension Service Publication AY-247 Winter Cover Crops-Their Value and Management. Beside the protection they provide against manure run-off from frozen ground, cover crops and residue cover greatly aid in preventing soil loss from erosion. The Indiana NRCS Field Office Technical Guide provides criteria for determining the proper amount of residue cover. Once established, any cover crop meets the requirement for adequate cover.

Comment: In 327 IAC 16-10-2(d), all application of manure to frozen ground should be prohibited. (HEC)

Response: IDEM does not believe this is necessary; that is, application to frozen ground may be permissible under certain circumstances.

Comment: This section should specify that the commissioner will require greater setbacks when the agency receives complaints from residents or occupants of public buildings that were present before the confined feeding operation began operation. (HEC)

Response: There are circumstances that do allow greater setback distances already in the rule.

Comment: In 327 IAC 16-10-5(b)(1), manure application rates for existing confined feeding operations should specify a ceiling rate for phosphorous application. Subsections 5(b)(1)(B) and (b)(2) should specify that manure application must be in accordance with agronomic rates for nitrogen and phosphorous.... (HEC)

Response: The rule provides adequate authority to address phosphorous if needed. However, there is not sufficient scientific information available as of yet to regulate strictly on phosphorous.

Comment: Phosphorous ties to the soil. Keep erosion under control and phosphorous stays put. Incorporation loosens the soil, causing erosion and phosphorous movement. (BBA)

Response: Incorporation places the manure phosphorous deeper where erosion usually does not occur.

Comment: I don't see where a blanket restriction on spreading waste in the floodplain of the Kankakee River is needed. There are many beef, dairy, and hog producers in this area that would be adversely effected by a ruling which required injection of waste or did not allow application of the waste. (TA)

Response: The use of floodplain ground is not prohibited. Spray irrigation in a floodplain will, however require an approved plan.

Comment: As far as putting so many gallons per acre, some manure doesn't have the value in it. (LD)

Response: IDEM understands the valuable nutrient content of different manures.

Comment: In 327 IAC 16-10-4 and 327 IAC 16-10-5, add: A(c) Application of manure on soil with 500 parts per million or more phosphorus is prohibited. (NCE)

Response: The concentration of phosphorous does not matter as much as adjusted rates of application based on soil testing.

Comment: Application requirements should be based on reasonable ground conditions, residue, and usage rates backed by soil tests and farm management practices. (RRSO2) Because of changes in technology and variation in soil types it is nearly impossible for IDEM to make long term broad coverage rules on application rates. Check the waters to see if there is a problem, but don't make a rule for everyone when only a limited number of violations ever occur. (GS)

Response: IDEM is utilizing modern nutrient management practices to assure impact on water quality is minimized.

Comment: The amount of manure applied to our land should be decided by the soil test. IDEM should be concerned about waste that moves over land to the state waters. (EML1) Manure application rates should be based on soil tests, and growing crop needs, as well as residues from previous years. (RRSO2)

Response: IDEM believes that manure nutrient analysis is also important information.

Comment: The S.C.S. doesn't want highly erodible land to be tilled and you want manure injected. Why doesn't IDEM contact other governmental agencies and try to work together instead of against each other? (EML1)

Response: IDEM has attempted to recognize the increased potential of runoff from increased sloped land. We have determined that our draft rule language regarding application on HEL designated land is inappropriate due to the erosion potential from disturbing the soil. That language will be altered. Given the perceived impact on tillage requirements and resulting erosion on slopes greater than 2%, as drafted in the rule, IDEM is considering raising the slope requirement mandating incorporation.

Comment: What is contaminated run-off? Is it anything that comes off my field in a hard rain? Does that include sediment, corn stalk, or manure residue from 4 weeks ago? This is too vague to count. If someone irrigates in one spot for 4 hours, he deserves to be punished. Punish him, not honest concerned farmers. (DW) It is not prudent to say that spreading manure on a field is a violation because there is a threat if rodent holes are present. (JDN)

Response: IDEM policy would be to recognize the activity that causes or contributes to a water quality problem. If the application was normal and in compliance with site use restrictions, no enforcement would proceed.

Comment: As a rural resident and farmer, we wish to express a need for animal waste to be knifed into the ground. We live in the center of 2 large hog farmers. On the days when they haul, it is impossible to be outside or inside without smelling it. It is not a day here and there, but several days at a time. Some type of restrictions need to be done for large hog farmers and chicken and turkey farmers. Why not have livestock waste be knifed in based on the number of hogs raised. (RS)

Response: IDEM is trying to encourage incorporation by reducing setbacks.

Comment: As long as I am knifing in manure and applying it as the law states I see no need in these other rules you are trying to pass. (CK)

Response: IDEM is trying to minimize duplication of coverage.

Comment: My biggest concern is the setback and the term "Other criteria". Does this really have anything to do with water quality? "Other criteria" seems to allow some people to create problems and make accusations too easily. (DB)

Response: Setbacks provide protection of water quality by reducing the likelihood that manure will reach the water. The term "Other criteria" provides added flexibility for IDEM to consider site-specific situations in making decisions.

Comment: The purpose of a manure management plan is to identify sensitive areas and to manage them accordingly. Wouldn't it be better to assess the effectiveness of the current requirements before changing them again? (JLS)

Response: The statutory manure management plan does not address methods of application to minimize nutrient loss.

Comment: We strongly object to the word "open" in 327 IAC 16-10-2(a)(3)(A). Many sinkholes thought to be "closed" have opened and drained catastrophically when enough hydrostatic head is applied. Since water does not pond in these features, and their very origin is caused by solution of bedrock, it should be evident that they are direct conduits to groundwater whether or visible opening is present or not. (IKC)

Response: The draft rule language does recognize the shape of the interior slope of the sinkhole relative to increased setback distances.

Comment: Although we support the restriction in 327 IAC 16-10-2(e), we are unclear how the 20 inches of soil is to be measured or how this requirement is to be documented and enforced. Under the current application process, ~~its~~ our understanding that test holes are obtained only in the immediate vicinity of the manure storage structure as outlined in 327 IAC 16-6-2(b)(6). (IKC)

Response: Soil survey books give information relative to this requirement.

Comment: If I adhere to ~~A~~agronomic rate must not exceed the nitrogen requirement of current or planned crop~~@~~, I may not be able to haul manure on some land, such as land I plan to plant soybeans. (RW)

Response: IDEM does recognize that soybeans will use added nitrogen. The natural method of fixation is reduced.

Comment: For those of us who truly believe in conservation and practices that promote conservation such as ~~A~~no till~~@~~ and ~~A~~conservation tillage~~@~~, the requirements of incorporation and injection are totally counterproductive. (BBA) Residue to me is chopped corn stalk, etc. There is~~n~~ enough ground that has a slope of less than 2%. As far as injecting it in the ground, Soil and Water recommends not to do it because of soil erosion. (LD)

Response: Many new liquid injection tools cause minimal soil disturbance. Solid manure can be surface applied on steep slopes if residue is adequate.

Comment: Let the farmer take his own soil samples and apply according to soil test and split applicate. (LD)

Response: IDEM agrees that soil tests provide critical information to use when making nutrient decisions.

Comment: To justify the setback distances proposed and the features used of distance, severe water quality problems must be identified. This is clearly not the case. With so much land~~out of bounds~~~~@~~ for manure application, IDEM is chopping up fields and unjustifiably tinkering with producer~~s~~ operations. Is there any data to show that setbacks with shorter distances than these have resulted in contaminated waters? (KCL) (MMC) The setbacks have not been justified. (DCPP)

Response: Many water quality problems have occurred due to application too close to streams resulting in runoff going directly to the stream.

Comment: Producers have a responsibility to ensure that proper application of the manure as a nutrient does not become a point source discharge and minimize any non-point source activity. (MMC) (KCL)

Response: IDEM concurs.

Comment: If you do this to livestock producers, you should limit the amount of commercial fertilizer grain farmers can apply to the land. (JLE)

Response: The circumstances of the use of manure as nutrient versus the purchase of commercial fertilizer are different. IDEM does not have specific regulatory authority to regulate commercial fertilizer used by grain farmers as does exist for application of manure from confined feeding operations.

Comment: In 327 IAC 16-10-2(a)(1), does this mean spreading manure so heavy that it causes runoff, or could it also mean that a heavy rain would also create a runoff? (RN1)

Response: If the application process was conducted in compliance with setback requirements, no enforcement would occur.

Comment: Who determines what the agronomic rate is, University, Crop consultants, or IDEM? I think this should be more defined as to who determines this and allow these to change from farm to farm as we the farmers learn more about what it takes to raise a crop on our farm in the most economical way. The knowledge is changing rapidly with the CPS information and the fertilize rates will change, IDEM needs to realize this and make the agronomic rate flex with this knowledge. (WSJ) (TI) In 327 IAC 16-10-4 and 327 IAC 16-10-5, agronomic rates for nitrogen are discussed. In our area it is not uncommon for commercial nitrogen to be applied at rates in excess of 180 lbs./acre. In our current soil testing program, we regularly are recommended to apply more nitrogen per acre than 150 lbs. (RN2)

Response: This would be allowed if the soil test recommendations call for it.

Comment: Agronomic rates can vary if you use a cover crop after applying manure. (MSMO) If this is my land, my manure, my hogs, my crops, and if your waters are not contaminated, then what should you care? (JLEM)

Response: Nutrient management is important in all areas of the state. IDEM would expect credit to be given to the cover crop if it is known that it will be planted.

Comment: Hauling manure, there are times when you cannot incorporate. (DGRE)

Response: IDEM anticipates improved timing of the application process in consideration of soil conditions.

Comment: Add a new rule, 327 IAC 16-10.1 as follows:

Rule 10.1 Manure Application Requirements for Industrial Confined Feeding Operations

Sec. 1. In addition to requirements in 16-10, land application rates for heavy metals in manure from industrial confined feeding operations shall not exceed rates established for land application of municipal sludge.

Sec.2. If a land application rate for a heavy metal in manure has not been established, the commissioner shall establish the rate.

(NCE)

Response: IDEM is not convinced these limitations are warranted.

Comment: While it may be appropriate for confined feeding operations to prepare manure management plans, they should not be difficult to prepare. There is a difference between operational tests for manure and lab test. A lab-tested manure analysis and soil analysis should be required every five years in conjunction with the manure management plan. If a production system requires more frequent testing, producers will take the necessary steps to perform it. (IBCA)

Response: IDEM believes a three year schedule provides more accurate assumptions.

Comment: 327 IAC 16-10-2 (a)(1) "Contaminated runoff" to replace "runoff." (a)(2) Ponding needs more explanation as to what period of time ponding is allowed. However, if ponding does not violate the performance standard, why should it matter. (a)(3) Unnecessary because a release or discharge into any of these would violate the performance standard. (d)(2) Solid manure should be allowable on slope greater than those of liquid manure due to mobility limitations. (IBCA)

Response: Ponding has been referred to as limited to 24 hours.

Comment: 327 IAC 16-10-2 I feel that producers should be allowed to irrigate effluent onto floodplain areas from lagoons during the growing season, where it will be used by a growing crop. Is this an activity you want to eliminate or allow only in a manure management plan? (BE) (LM) (GT)

Response: A detailed plan may justify the allowance.

Comment: 327 IAC 16-10-3 (a) There is a general problem with the categories identified in the chart. To justify the setback distances proposed and the features used for distances, a severe water quality problem must be identified. Is there any data to show that setbacks with shorter distances than these have resulted in contaminated waters? Where did these numbers come from: If a producer cannot pollute, then the plan must accomplish the or he/she will pay. (d) Surface applied manure will not be incorporated within any time period on the land. This section needs to clearly define its intent regarding injection applications. (IBCA)

Response: The chart, now in 327 IAC 16-10-4(a), has been modified in response to numerous comments.

Comment: There is no justification for the increase in setbacks for manure application. There is no need to require further setbacks from a road if it is flat and has no immediate neighbors. (SL) (WJ) (CAF) (DHS) (JTK) (APE)

Response: Any ditch along the road may be a direct conduit to nearby waters.

Comment: 327 IAC 16-10-5 We recommend that a chart be created to more effectively lay out time and practices. (IBCA)

Response: IDEM has clarified this information and moved it to 327 IAC 16-6-1(e).

Comment: Why do I have to give someone that takes my manure and applies it to his ground or I apply it an information sheet? Is the manure toxic, hazardous, or dangerous? We are using the manure as fertilizer, I do not tell a landlord or provide an information sheet to him when I fertilize his farm, why is the manure different. (WSJ) (LF)(WJ)(DCPP1)(JC)(JKU) (GCA) (RD) (JTK) (LM) (DCPP2)

Response: The information sheet is only necessary when someone else is handling the application activity.

Comment: You should modify our liability on the manure given to neighbors. These people have handled this material much of there lives. How can I watch them spread every gallon? (JHO)

Response: There is no requirement to observe the application activity of neighbors. Providing them with the information sheet helps ensure they apply the manure appropriately.

Comment: I believe that you are adding additional liability to me if a local grain framer wishes to have manure applied to his land. Additional record keeping is just added labor that is unnecessary. (SL)

Response: It provides better information upon which to assist in making fertility decisions.

Comment: The farmer should be able to use his ground as he sees fit and capture the benefits of manure fertilization on all acres where it will not lead directly to ground water contamination. The set back requirement from property boundaries is folly. Manure fertilization should not be restricted any more than application of commercially prepared fertilizers and pesticides. (NCB) (WOF) (APE)

Response: IDEM believes the quantity of manure used for fertilization is significantly greater than the amount of commercial fertilizer used, therefore, the chance for migration of manure off the site are greater.

Comment: I'm also concerned about the rule that would prevent hauling manure on frozen ground. It still should be allowed. (DDD) (UF)

Response: IDEM is not going to prohibit frozen ground application where runoff potential is minimal.

Comment: Staying 50' from a property line, when no neighbor exists in a 20 acre field don't give you much room to apply manure. Please take this out. (SR) (JHO) (MN) (WM) (DMO) (LF) (RV) (WJ) (JC) (OE) (JKU) (BAI) (RSI) (RD) (SHB) (ER) (KHA)(DCPP)

Response: Property line waivers can be obtained and slope has been recognized.

Comment: Just what are the bacteriological standards for a discharge on open land? I certainly would not want to drink or many times of the year, even swim in the run-off from this so called "pristine area" (State Forest). My point is that in some instances your working is very specific but in other places the phrasing is ambiguous to the point of being quite scary. (CL)

Response: IDEM continues to work to clarify ambiguous phrases and welcomes specific suggestions on how to do so.

Comment: I feel you need to relax the process of changing the spreading acres. This process is so stringent that we don't dare change for fear of opening up our permit. We want to have the ability to implement new technology in manure application and soil management without worrying about protracted legal battles regarding our permit. (JHO)

Response: There is not a formal process for changing spreading acres. The only requirement is that a change must be made in the operating record which is kept on the farm.

Comment: In your proposed rules for manure application you have increased distances that manure can be applied around wells, sinkholes, waters of the state, roads and property lines and public water supply. Your increased distances to these permanent landmarks will greatly reduce available land for manure. What are we to do? (JT) (RR) (UF)

Response: IDEM has modified setback requirements. The manure can be placed in areas that have a need for nutrients and have not already been used.

Comment: I totally disagree with the setbacks on applying manure. We inject our manure wherever there is going to be a crop. That includes next to our houses, several neighbors' houses, the church down the road, the ditch banks and tile inlets. I am confident that properly injected manure does not move even with a big rain and it does not smell. (MMO) (GSFP) (GT)

Response: IDEM concurs and has modified the setbacks accordingly.

Comment: Let the farmer manage his application. He knows best what to do. You are with the new regulations stopping the most economical way of applying the manure. Besides, do these setbacks apply to normal commercial fertilizers? What is the difference? (RR) (JC) (FG) (GSFP)

Response: The farmer has the decision making power in the new rule to manage his application, but must meet certain protective requirements. IDEM does not have the authority in this draft rule to regulate commercial fertilizer.

Comment: Spraying and surface applying manure would be different and those vary greatly by dilution factors and whether the manure is from a lagoon, holding pond or from a pit. There is so much difference between different systems, they cannot be grouped together by generalizations and rules. (MMO)

Response: IDEM concurs. The results of a manure test will assist in determining application rates.

Comment: We do not feel that farm drainage tiles should be regulated as "waters of the state". (MLB)

Response: The only time "waters of the state" is used relates to a prohibition from polluting. Drainage tile setbacks are from surface waters only.

Comment: The regulations should require a landowner of neighboring property to notify you of changes to his land that would be limiting on my manure spreading. (JKU)

Response: Setbacks to these items should be easily observable from the application area.

Comment: I agree with the need to regulate the amount of manure applied per acre because, again, the few who keep hauling to the closest field year after year. But I have a problem with all the minute detail that would be required in the future. (LLA)

Response: IDEM concurs with the need to prevent over-application and has worked with the workgroup to remove details which are not necessary.

Comment: I can see a need for regulations on large dairies and feeding operations, but testing of manure, recordkeeping of how much applied and where is not feasible or necessary. (GT)

Response: IDEM feels these requirements are necessary to protect the environment.

Comment: The farmers are already approved for a set number of animals. I believe that it would be better if it was by the pounds. (JDE)

Response: Indiana statute sets the requirements for regulation by the animal and not by the pound.

Comment: I think you should not regulate a manure injection system the same way you regulate an irrigation system. There is no offensive odor and no risk of contaminating water. This would encourage other producers to start using an injection system. (DDD) (LLA)

Response: Based on setbacks and other requirements, injection is encouraged and recommended.

Comment: Nearly all our manure is injected with our tank wagon. Injected phosphorus does not move under normal conditions. I am concerned about future regulation that may unnecessarily restrict application rates on our high CEC soils. (JDH) (LLA)

Response: IDEM is not currently proposing specific phosphorous limits.

Comment: Requirements should include injection equipment that seals completely despite soil moisture soil type, slope, etc. I believe if you want us to prevent any soil run off and eliminate odor, injection equipment has to be limited to those that completely cover under most conditions. (LLA)

Response: Injection is not currently required.

Comment: Requirements to incorporate manure will require tillage which is know to increase erosion, a major source of water contamination. These rules also discourage the use of manure as a fertilizer source. (VAA)

Response: Incorporation is not required. This rule is not intended to discourage the use of manure as a fertilizer source; instead it mandates manure use as a fertilizer source.

Spray Irrigation

Comment: Constant supervision of a spray irrigation system does not make sense. (RCL) (GF) (PCG) (NN) (WT) (ICARD) (LK) (KA) (RTL2) (KKA) (APA) (DHB) (FCS) (MLR) (JTH) (RBA) (SHI) (MBR) (MSMO) (KGR) (BMM) (JOY) (JLEM) (GLM) (LLP1) (DKI) (BGU) (DTS) (NSCH) (ANON6) (BS) (DTH) (DBA) (HST) (HSM) (HSP) (HSRT) (HSB) (HSI) (HSCY) (BVF) (RTE) (EJN) (AGRI) (RJ) (BJR) (JLH) (LTE) (LS) (KOF) (KR) (JP) (TFL) (TBU) (SB) (MIF) (IPPA) (SMOF) (BD) (BK) (BC) (CHF) (CJMC) (DJM) (DMB) (DP) (GMC) (GBR) (HE) (JO) (NESS2) (WW) (RJMC) (DSL) (CKO) (RSF) (BW) (EML1) (GC) (CK) (BLA) (DD) (CWS) (TB) (MDK) (LLP) (JD) (L&SP) (KD) (HW) (DCPP) (CW) (TSH) (MSB) The concern about spills from irrigation should be dealt with through enforcement provisions rather than regulating management. (IPPA) The operator should determine if constant supervision is required to properly apply manure to a field. (RY) How broad is Aconstant supervision@? (NESS1) I agree 100% in manure management, nutrient analysis, and emergency response plans, but is it necessary to pay your people to watch my irrigation system or my knifing system while it runs? Why don't we leave the responsibility on the farmer and have the farmer submit time and date information on their manure management plan? (BH) Spray irrigation equipment should be monitored, but someone passing by may not see the operator. This could lead to false accusations against the operator. (LMG) The rule stating that irrigation equipment must be under Aconstant@supervision of a designated person is too ambiguous. Does this mean that someone must have the sole responsibility of watching the equipment at all times? I believe the word Aconstant@ should be eliminated from the rule. There would still be the requirement that a designated person supervise the irrigation operation, but there would not be a potential violation just because someone reports to IDEM that no one was out watching the irrigation equipment. (RES) You have proposed rules that would force us to hire extra farm hands to monitor manure irrigation equipment. (JT) (WB) 327 IAC 16-9-4(k) With good equipment and proper set-up and start-up, there is no reason to constantly supervise the operation of an irrigation system. Yes, it should be checked on periodically. (AML)(JHO) (RR)(SM) (LF)(KC)(WJ)(DCPP1)(JC) (DLK) (JWM) (ADP) (JTK) (APE) (DCPP2)

Response: Many of the most significant water quality problems have occurred due to unattended spray irrigation equipment. Additional options to constant supervision have been made in the proposed rule.

Comment: Which end of the irrigation unit has to be watched when you're irrigating? (JJT)

Response: Any part which could cause leakage or spillage should be watched.

Comment: IDEM should ban spraying manure over a field. According to IDEM personnel, 9 out of 10 problems with runoff and stream contamination are a direct result of spraying manure. Moreover, if the manure is actually serving a productive purpose, spraying would appear to be counter productive as spraying allows a greater percentage of nitrogen-bearing compounds to escape into the atmosphere. (NCE) Manure should never be allowed to be irrigated. (STF) In 327 IAC 16-9-4(k), to prevent leaks and over-application of liquid wastes, spray irrigation of manure should be banned altogether. (HEC)

Response: Spray irrigation if handled properly can be conducted in an environmentally sound fashion.

Comment: We think irrigation on standing crops should be allowed if there is no run-off. (LUE)

Response: A plan can be developed that may justify the allowance.

Comment: The 2% grade restriction is too limiting if other conditions favor irrigation. (LUE)

Response: Residue can also reduce the restriction. This section has been modified.

Comment: Disallowing spray irrigation in a floodplain will significantly restrict several operations from managing their manure management plan effectively. If effective enforcement provisions are enacted, IDEM would not find it necessary to write a rule to cover this. (IPPA) Spray irrigation in a floodplain even with good vegetative cover would be disallowed with this rule, this is unacceptable. (DTS)

Response: Application within a floodplain must be handled in accordance with a plan.

Closure

Comment: We concur that manure storage structure usage may be discontinued for a period of time without the need for closure procedures. (IPPA) There needs to be some provision in the event a manure structure is closed for a time, but may need to be re-opened. (KSCH)

Response: A confined feeding operation would not be considered closed under the proposed rules until all the closure requirements found under rule 11 would be met. After such closure, the facility would need a new confined feeding approval before renewing operations.

Comment: 327 IAC 16-11-3(c)(5) When and if we decide to discontinue the use of our lagoon for manure storage and treatment, I fully intend to clean it out (or allow it to clean itself up with continuing aeration) and use it for a fish pond. This section seems to rule this option out. Why? (AML) Why can an owner clean out an earthen storage and use it for a pond? (RY)

Response: The rule does not prohibit converting storage structures to other uses. IDEM is to be notified of the discontinued use and intended future use.

Comment: 327 IAC 16-11-3 (e)(1) through (3) If any of these situations arose, each instance would violate the performance standard prohibiting manure or contaminated runoff from entering bodies of water. Therefore this section is not needed because of its redundancy. (IBCA)

Response: IDEM believes that it is necessary to have clear authority to oversee and approve all efforts to remediate a real or potential water quality violation.

Comment: A cost to water quality benefit analysis should be done on closing an earthen storage structure. At what point is enough removed? (RY)

Response: IDEM allows risk management closures. The guidance document will provide reasonable expectations.

Comment: Monitoring wells should continue to be used to monitor the site for at least 5 years post-closure. Longer monitoring may be warranted if contamination is detected. The application should require an environmental assurance bond to be returned to the operator when closure is complete with no contamination problems. (HEC)

Response: IDEM's experience has not demonstrated a need for assurance bonds.

Comment: In 327 IAC 16-11, replace "owner and operator" in the rule with "operator in responsible charge or control". (NCE)

Response: The language has been modified.

Comment: We encourage the addition of language in 327 IAC 16-11-3(e) that the commissioner shall provide written documentation for the basis of requiring additional closure activities. (IPPA)
Commissioner should have written documentation for additional requirements. (RIF)

Response: IDEM concurs and has made the change.

Comment: I do respect the notification of closure records. (RRSO1)

Response: IDEM concurs.

Inspections

Comment: Environmental inspections are needed. Random inspections, not scheduled, to insure proper operation procedures are being followed throughout the year. In our area, the livestock's liquid manure is sprayed onto the farm land, without knifing in, sometimes as many as two or three times a year. By monitoring the situation or putting controls in place, this problem would be solved. (BLC)

Response: IDEM concurs.

Comment: It appears that producers will be responsible for proving their compliance upon threatened violations. This ruling would open the floodgates for animal rights activists, neighbors, and disgruntled employees to waste the producer's time and money defending themselves against claims that may have never had any validity. IDEM should be provided with strong evidence of a violation before the facility is investigated and subjected to this burden of proof. (GB) There should be positive proof my operation is in non-compliance before I am forced to spend time and money to buy or build something which is not necessary. (EO)

Response: An IDEM inspector or emergency responder will respond to complaints and spill calls and inspect the operation. During the onsite inspection the merit of the complaint will be assessed by the inspector. An inspection report will be completed on each inspection which will list factual observation and corrective actions if required. If the report is not completed at the time of the inspection, a copy of the report will be mailed to the responsible party within forty-five (45) days of the inspection. Although IDEM is not required to give advanced notice of an inspection, it is the Office's policy to provide 24 hours notice prior to the initial routine inspection of a facility. Notice is not given on complaint inspections or spill responses. The complaint records are public information and a request for this information may be sent to the file room. Anonymous complaints are investigated so information on the complainant is not always available. As part of the guidance IDEM will include copies of its inspection forms based on the new rule. Specifics related to how IDEM will handle violations and

recommendations during inspections will have to wait until the rule is finalized.

Comment: I am concerned that IDEM is developing a legal checklist with numerous provisions that will nearly ensure I will be out of compliance with some provision without ever causing a water quality violation. This is fundamentally wrong and should be addressed with the current, clear performance standard and effective guidance to assist me in meeting the standard. (GFL) (MMC) (DLS) (CREG) (BSCH) (KCL) (RAR) (RDR) (IFB) (BJRO) (BGUE) (IBCA) (JDH) (JS) (CAB) (DTR)

Response: IDEM is not trying to ensure non-compliance with the rules. IDEM will provide guidance that will more thoroughly explain how inspections are conducted and what is looked for at the facility.

Comment: I am totally against IDEM being able to come on my property because a neighbor complains. If this new law comes into effect, there will be problems. (MOF)

Response: IDEM inspectors are authorized in IC 13-14-2-2 to enter upon any private or public property to investigate possible violations of the Indiana Environmental Management Act or any rule promulgated thereunder. IDEM inspectors do not enter the buildings on site during an inspection. IDEM inspectors wear disposable boots or equivalent protection and will follow all reasonable biosecurity measures which are in effect at a site. IDEM is also working with the Indiana State Board of Animal Health to maintain a high level of biosecurity during inspections.

Comment: For those who flagrantly violate a realistic, existing law, please punish them under the full provisions of the law. (MFI) Get tough with repeat violators that are contaminators and are poor stewards, but use common sense with others. (SEP)

Response: IDEM concurs.

Comment: In your opening round of inspection it appeared that your inspectors either did not know what they were doing or that they did not care what happened to the farms that they inspected. Most inspectors told the farmers that they were inspecting that they had just come from a farm or that they were going to visit another farm. I am wondering if Indiana's recent outbreak of Pseudorabies can be traced right back to your employees. (KH)

Response: The agency field staff are all trained professionals, some of which have agricultural degrees, some of which do not. Some of the inspectors are from a farming background, some are not. All of the inspectors have multiple years of experience responding to environmental complaints and protecting Indiana's water and land resources. When they began conducting confined feeding inspections, the inspectors underwent training in confined feeding inspection techniques, both in the classroom and on the farm. If you have a concern with the actions of an inspector then please contact their supervisor.

Comment: Why don't you do inspections and enforcement of the rules you already have without trying to grab more and broader authority? (EP) The laws are in place - enforce them for those choosing to break the law. Don't punish everyone for the sake of the few bad apples. (PMC) If IDEM is not able to monitor and enforce the current rules effectively, I cannot see where making them more complex is going to solve anything. (GR)

Response: IDEM is responding to the charge of the legislature to develop sensible rules to regulate an activity that may have an extremely detrimental impact on water quality.

Comment: My greatest concern is the ability of IDEM to enforce such proposed rules. My sense is you don't have the manpower to do so. (JMC) IDEM is understaffed at present so how can you take on such a broad and comprehensive program as you have proposed in this document. (HWK) IDEM lacks the capacity to implement the proposed regulation, particularly in terms of experienced and properly trained personnel. We recommend that IDEM continue to do the inspection of confined feeding facilities, but that these inspectors receive additional and ongoing education regarding production facilities so that they are in a position to understand what they are seeing when they are in the field. (IFB)

Response: IDEM continues to evaluate personnel needs to properly implement this rule and educate inspectors on the facilities they must inspect.

Comment: Will there be any agency inspection in relation to closure in 327 IAC 16-11? (WR)

Response: Yes, IDEM plans to inspect each manure storage structure that is to be closed.

Financial Responsibility

Comment: Bonding requirements should apply to the corporations and packers/processors that force farmers to sign prescriptive contracts. The surety bonds would be posted for potential ground water and surface water contamination. (NCE)

Response: These rules can not address private contract rights.

Comment: Add a new rule 327 IAC 16-8.1 as follows:

Design and Construction of New Manure Storage Structures at Industrial Confined Feeding Operations

Sec 1. In addition to requirements in 16-8, the following is required for new manure storage structures at industrial confined feeding operations:

- (1) ground water monitoring systems based on IAC 16-5-2; and
- (2) synthetic liners.

Sec. 2. The operator in responsible control or charge of an industrial confined feeding operation shall establish financial assurance for corrective action and closure from the following options:

- (1) The operator in responsible control or charge shall demonstrate financial assurance for corrective action and closure by obtaining a:
 - (A) trust fund;
 - (B) surety bond; or

(C) letter of credit;

on forms provided by the commissioner or in such other form as approved by the commissioner.

(NCE)

Response: IDEM continues to work with all interested parties to provide additional safeguards for operations that may have a larger potential effect on the environment. At this point, industrial confined feeding operations[@] is not a term that adequately describes the many different confined feeding operations within the state.